# Initial Study
***and***
# Mitigated Negative Declaration

***for***

# Owens Valley Land Management Plan

**Los Angeles Department of Water**
**Environmental Services**
**111 North Hope Street, Room 1044**
**Los Angeles, CA 90012**

**March 2010**

COUNTY CLERK'S USE

CITY CLERK'S USE

# CITY OF LOS ANGELES
## OFFICE OF THE CITY CLERK
## ROOM 395, CITY HALL
## LOS ANGELES, CALIFORNIA 90012
## CALIFORNIA ENVIRONMENTAL QUALITY ACT
# PROPOSED
# MITIGATED NEGATIVE DECLARATION
### (Article V, City CEQA Guidelines)

| **LEAD CITY AGENCY:** | **COUNCIL DISTRICT** |
|---|---|
| Los Angeles Department of Water and Power (LADWP)<br>111 North Hope Street, Room 1044<br>Los Angeles, CA 90012 | N/A |
| **PROJECT TITLE:**<br>Owens Valley Land Management Plan | **CASE NO.** |

**PROJECT LOCATION:** The Owens Valley Land Management Plan (OVLMP) is a resource management guide for City of Los Angeles-owned, non-urban lands in the Owens River Watershed in Inyo County, California (excluding the Lower Owens River Project (LORP) planning area). The project area for river management encompasses the Middle Owens River from Pleasant Valley Reservoir to the Los Angeles Aqueduct intake and includes the adjacent terraces. The project area for grazing management encompasses the 50 grazing leases managed by Los Angeles Department of Water and Power (LADWP) in Inyo County. These lands are on the Rovana, Fish Slough, Laws, Tungsten Hills, Bishop, Poleta Canyon, Big Pine, Uhlmeyer Spring, Fish Springs, Tinemaha Reservoir, Aberdeen, Blackrock, Independence, Bee Springs, Manzanar, Union Wash, Lone Pine, Dolomite, Bartlett, Owens Lake, Keeler, Olancha, Vermillion Canyon, and Haiwee Reservoir 7.5 minute U. S. Geological Survey (USGS) quadrangles.

**DESCRIPTION:** The 1997 Memorandum of Understanding (MOU) among LADWP, Inyo County, the Owens Valley Committee (OVC), the Sierra Club, the California Department of Fish and Game (CDFG), the California State Lands Commission (SLC), and Carla Scheidlinger outlines the requirement for an OVLMP for city of Los Angeles-owned, non-urban lands in the Owens River Watershed in Inyo County (excluding the LORP planning area). The MOU states that LADWP shall continue to protect water resources used by the citizens of Los Angeles while providing for the continuation of sustainable uses such as recreation, livestock grazing, agriculture, and other activities. In doing so, LADWP shall promote biodiversity and healthy ecosystems, and address situations or problems that occur from the effects of various land uses on City of Los Angeles-owned property. The MOU states that priority is to be given to riparian areas, irrigated meadows, and sensitive plant and animal habitats.

**NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY**

**FINDING:**

See attached Initial Study.

**SEE INITIAL STUDY FOR MITIGATION MEASURES IMPOSED**

**THE INITIAL STUDY PREPARED FOR THIS DOCUMENT IS ATTACHED**

| **NAME OF PERSON PREPARING THIS FORM:** | **TITLE:** | **PHONE:** |
|---|---|---|
| Irene Paul | Environmental Specialist | (213) 367-3509 |
| **ADDRESS:**<br>111 N. Hope Street, Room 1044<br>Los Angeles, CA 90012 | **SIGNATURE (Official)**<br>Irene Paul for<br>Charles C. Holloway, Manager of Environmental Assessment and Planning | **DATE**<br>March 10, 2010 |

Form Gen. 157 (Appendix C)

# CEQA Initial Study
# and Mitigated Negative Declaration

# Owens Valley Land Management Plan

March 2010


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Los Angeles Department of Water and Power

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# Section 1
# Project and Agency Information

## 1.1 PROJECT TITLE AND LEAD AGENCY

| | |
|---|---|
| **Project Title:** | Owens Valley Land Management Plan |
| **Lead Agency Name:** | Los Angeles Department of Water and Power |
| **Lead Agency Address:** | 111 North Hope Street, Room 1044<br>Los Angeles, California 90012 |
| **Contact Person:** | Ms. Irene Paul |
| **Contact Phone Number:** | (213) 367-3509 |
| **Project Sponsor:** | Los Angeles Department of Water and Power |

## 1.2 PROJECT BACKGROUND AND OBJECTIVES

The City of Los Angeles Department of Water and Power (LADWP) has prepared this Initial Study (IS) to address the impacts of construction and operation of the Owens Valley Land Management Plan (OVLMP, proposed project). The OVLMP is a resource management guide for City of Los Angeles-owned non-urban lands in Inyo County, excluding the Lower Owens River Project (LORP) area. The OVLMP provides a framework for implementing management prescriptions through time, monitoring the resources, and adaptively managing changed land and water conditions. The IS serves to identify the site-specific impacts, evaluate their potential significance, and determine the appropriate document needed to comply with the California Environmental Quality Act (CEQA). Based on the IS, a Mitigated Negative Declaration (MND) is the appropriate CEQA document. Staff recommends that the LADWP Board of Commissioners (Board) adopt this IS/MND for the proposed project.

### 1.2.1 Project Background

The 1997 Memorandum of Understanding (MOU) among LADWP, Inyo County, the Owens Valley Committee (OVC), the Sierra Club, the California Department of Fish and Game (CDFG), the California State Lands Commission (SLC), and Carla Scheidlinger outlines the requirement for an OVLMP for Los Angeles-owned, non-urban lands in the Owens River Watershed in Inyo County (excluding the LORP planning area). The MOU states that LADWP shall continue to protect water resources used by the citizens of Los Angeles while providing for the continuation of sustainable uses such as recreation, livestock grazing, agriculture, and other activities. In doing so, LADWP shall promote biodiversity and healthy ecosystems, and address situations or problems that occur from the effects of various land uses on City of Los Angeles-owned property. The MOU states that priority is to be given to riparian areas, irrigated meadows, and sensitive plant and animal habitats.

LADWP, in collaboration with Ecosystem Sciences (ESI), developed a first draft of the OVLMP in February 2007 for review by Inyo County Water Department and CDFG. The Final Plan incorporates the comments received. The OVLMP is a management framework that outlines overall policies as well as specific actions related to the management of riverine-riparian resources, grazing, recreation, and cultural resources. The plan describes existing procedures and policies for fire management. The plan also presents monitoring and adaptive management processes to continually improve land management.

### 1.2.2 Project Objectives

LADWP prepared, and proposes to implement, the OVLMP for Los Angeles-owned, non-urban lands in the Owens River Watershed in Inyo County (excluding the LORP planning area) in compliance with the MOU and the 2004 Stipulation and Order related to the MOU. The goals of implementing the OVLMP are to provide for the continuation of sustainable uses (including recreation, livestock grazing, agriculture, and other activities) while promoting biodiversity and a healthy ecosystem (with consideration of Threatened and Endangered (T&E) species habitat) and protecting the water resources used by the citizens of Los Angeles.

The MOU goals and objectives are detailed in the text of the OVLMP (Section 1.5) and are summarized in **Table 1**. Goals and objectives for individual parts of the OVLMP are summarized below in Section 1.4, Project Description.

**Table 1**
**MOU Goals and Objectives of the OVLMP**

| | |
|---|---|
| **Goals** | 1. Continue to supply water to the City of Los Angeles. |
| | 2. Implement sustainable land management practices for agriculture (grazing) and other resource uses. |
| | 3. Continue to provide recreational opportunities on all city-owned lands. |
| | 4. Improve biodiversity and ecosystem health (condition). |
| | 5. Protect and enhance habitat for T&E species. |
| **Objectives** | 1. Maintain existing average in-channel flows. |
| | 2. Allow for annual out-of-channel or pulse flows to maintain existing riparian/wetland habitats. |
| | 3. Initiate ramping rates to minimize rapid water level changes. |
| | 4. Implement grazing strategies within riparian and upland pastures. |
| | 5. Establish a fire response plan. |
| | 6. Modify the location and intensity of recreational activities. |
| | 7. Establish guidelines to protect cultural resources. |
| | 8. Establish commercial use protocols. |
| | 9. Initiate habitat conservation strategies to enhance and protect T&E species habitat. |
| | 10. Monitor and use adaptive management through time. |

### 1.2.3 Related Management Activities and Documents

The OVLMP includes detailed actions for river, grazing, recreation, cultural resources, and fire management, as well as overall monitoring and adaptive management. Related natural resources management activities for habitat conservation planning, commercial use management, and special management areas (e.g., specific habitat enhancement projects) are referenced in the OVLMP but fully described in separate documents.

**Habitat Conservation Plan**. In compliance with the federal Endangered Species Act Section 10(a)(1)(B) and the California Endangered Species Act Section 2080, LADWP is currently preparing a Habitat Conservation Plan (HCP) for City of Los Angeles-owned lands in Inyo and Mono counties from the Mono Basin south to Owens Dry Lake. The process authorizes the U.S. Fish and Wildlife Service (USFWS) to issue permits for the "incidental take" of T&E species. The goal is to protect and enhance habitat for T&E species through implementation of a low-effect, habitat-based HCP that protects covered species while allowing LADWP to continue operations. The species to be covered under the HCP are Owens pupfish (*Cyprinodon radiosus*), Owens tui chub (*Gila bicolor snyderi*), Least Bell's Vireo (*Vireo bellii pusillus*), Yellow-billed Cuckoo (*Coccyzus americanus*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*) and Greater Sage Grouse (*Centrocercus urophasianus).*

The HCP incorporates the *Owens Basin Wetland and Aquatic Species Recovery Plan* (1998) to describe specific actions and sites that have the greatest potential for recovery and delisting of species. The HCP will also relate to other existing recovery plans and species conservation efforts already drafted for areas that overlap the project area boundaries, including the *Draft Recovery Plan for the Least Bell's Vireo* (1998), the *Recovery Plan for the Southwestern Willow Flycatcher* (2002), and the *Conservation Strategy for the Southwestern Willow Flycatcher on City of Los Angeles Department of Water and Power Lands in the Owens Management Unit* (2005).

**Commercial Use Policy.** The Commercial Use Policy describes the existing practices of LADWP's Real Estate Section. The Real Estate Section manages city-owned non-operating property under the control of the Aqueduct Division. With approval of the Board and its Chief Administrative Officer, the Real Estate Section grants and sets the terms and conditions (duration, extent, limitation, and review) for any franchise, concession, permit, license, or lease concerning any property under its control. Leases, License Agreements, Letters of Permission and Use Permits are issued for:

- Business Leases - Business leases generally cover uses on City of Los Angeles property located in established communities, and associated with commercial, recreational, and public purposes. Business leases can also be issued for fish hatcheries, borrow pits, campgrounds and airports.

- Ranch Leases - Ranch leases (generally under a 5-year term) cover property leased for agricultural and cattle grazing purposes. As described in Section 1.4, land management of ranch leases is a key focus of the OVLMP.

- Letters of Permission - A Letter of Permission is issued to grant permissive use of, or on, City property that is associated with a specific event or activity limited in duration (e.g., charitable runs, horse drives, studies, and community events).

- Use Permits - Use permit rental agreements are issued to cover personal or private exclusive use of City property for a specific purpose that is not generally commercial or business related (e.g., private pastures, additional yard spaces, residential rental agreements, etc.).

- Apiary Permits - Apiary permits are issued for the placement of bee boxes for harvesting honey on City property.

- Burn Permits – Where appropriate, burn permits are issued to lessees to burn small piles of brush or debris, or larger expanses of City-owned property. The permit must be accompanied by either a Local Fire District Permit or a Burn Permit from the State of California, Department of Conservation, Division of Forestry. The application and permit for Range Improvement Burns is used when a large expanse (a maximum of 50 acres) is to be burned at one time.

- Film Permits – As appropriate, film permits are issued for activities without large-scale disruption of terrain or vegetation. For leased properties, the lessee must also consent.

- Wood Permits – As appropriate, LADWP issues wood permits from May through October for cutting dead or downed trees, and gathering firewood. Rarely, permits are also issued for cutting live trees for clearing ranch lands or cutting fence posts. For leased properties, the lessee must also consent.

**Special Management Areas**. The MOU outlines the requirement for additional commitments to those identified in the 1991 Environmental Impact Report (EIR) concerning LADWP's groundwater pumping and related activities (LADWP, 1991). These commitments are the Final Ad Hoc Yellow-Billed Cuckoo (YBC) Habitat Enhancement Plan and the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Reference to these special management areas is included in the OVLMP but the projects are being implemented separately.

Yellow-Billed Cuckoo. Based on the evaluation of riparian woodland areas conducted by LADWP and ESI, the Final Ad Hoc Yellow-billed Cuckoo Habitat Enhancement Plan was developed to maintain and/or improve conditions for YBC at Baker and Hogback Creeks. This plan was developed by representatives of the MOU Parties and the ranch lessees of the plan areas. Under the plan, habitat conditions would be maintained and/or improved at each site through the implementation of project actions such as planting of native riparian vegetation, alteration of grazing practices, amended recreation policies, and altered trails. LADWP adopted a MND for the Final Ad Hoc Yellow-Billed Cuckoo Habitat Enhancement Plan on January 19, 2010. Construction of project components is in progress as of February 2010.

Additional Mitigation Projects. Section III.A.3. Additional Mitigation of the MOU describes the commitment to supply 1,600 Acre-Feet of water per year (AF/yr) for 1) the implementation of the on-site mitigation measure at Hines Spring identified in the 1991 EIR, and 2) the implementation of on and/or off-site mitigation in addition to that identified in the 1991 EIR for impacts that occurred at Fish Springs, Big and Little Blackrock Springs, and Big and Little Seely Springs. An Ad Hoc group consisting of representatives from the MOU Parties and affected ranchers (LADWP lessees) selected the proposed mitigation sites (Hines Spring plus seven additional sites) and designated the annual allotment of water for each site (MOU Ad Hoc Group, 2008). The Additional Mitigation Projects are the subject of a separate CEQA document (process ongoing as of March 2010).

## 1.3 PROJECT LOCATION AND ENVIRONMENTAL SETTING

The OVLMP will be implemented within the Owens Valley Management Area (OVMA) - Los Angeles-owned, non-urban lands in the Owens River Watershed in Inyo County, California (excluding the LORP planning area) (**Figures 1** and **2**). The City of Los Angeles is the primary land owner in the Owens Valley; the City owns and manages approximately 250,000 acres within the OVMA (including the LORP area). The project area for river management encompasses the Middle Owens River from Pleasant Valley Reservoir to the Los Angeles Aqueduct (LAA) intake and includes the adjacent terraces. The project area for grazing management encompasses the grazing leases managed by LADWP in Inyo County. These lands are on the Rovana, Fish Slough, Laws, Tungsten Hills, Bishop, Poleta Canyon, Big Pine, Uhlmeyer Spring, Fish Springs, Tinemaha Reservoir, Aberdeen, Blackrock, Independence, Bee Springs, Manzanar, Union Wash, Lone Pine, Dolomite, Bartlett, Owens Lake, Keeler, Olancha, Vermillion Canyon, and Haiwee Reservoir 7.5 minute U. S. Geological Survey (USGS) quadrangles.

The Owens River is located in Eastern California in Mono and Inyo Counties (**Figures 1** and **2**), and occupies the western terminus of the Great Basin Geologic Province (Danskin, 1998). The long, narrow north-south trending Owens Valley is a graben between two large fault blocks that form the Sierra Nevada Range to the west and the White and Inyo Mountains to the east. These mountains rise more than 9,000 feet above the valley floor with the Sierra Nevada and the White Mountains achieving heights greater than 14,000 feet. The valley floor ranges from 4,500 feet elevation near Bishop to nearly 3,500 feet above sea level near Owens Lake (Danskin, 1998).

The Sierra Nevada greatly influences the climate of the Owens Valley. Average precipitation ranges from more than 30 inches per year (in/yr) at the crest of the Sierra Nevada to about 7 to 14 in/yr in the Inyo and White Mountains, to approximately 5 in/yr on the valley floor. The climate in the Owens Valley is characterized by low precipitation, abundant sunshine, frequent winds, moderate to low humidity and high potential evapotranspiration. Monthly air temperature ranges from below freezing in winter to more than 100 degrees Fahrenheit (F) in summer.

The Owens Valley is incised by one major trunk stream, the Owens River, which meanders southward through the valley. Streams originating in the alpine areas of the Sierra Nevada drain east to Owens Valley where they confluence with the Owens River and eventually the LAA, the LORP, or Owens Lake for dust mitigation. In contrast, streams originating in the White and Inyo Ranges, which are often ephemeral due to the lack of precipitation, do not provide much

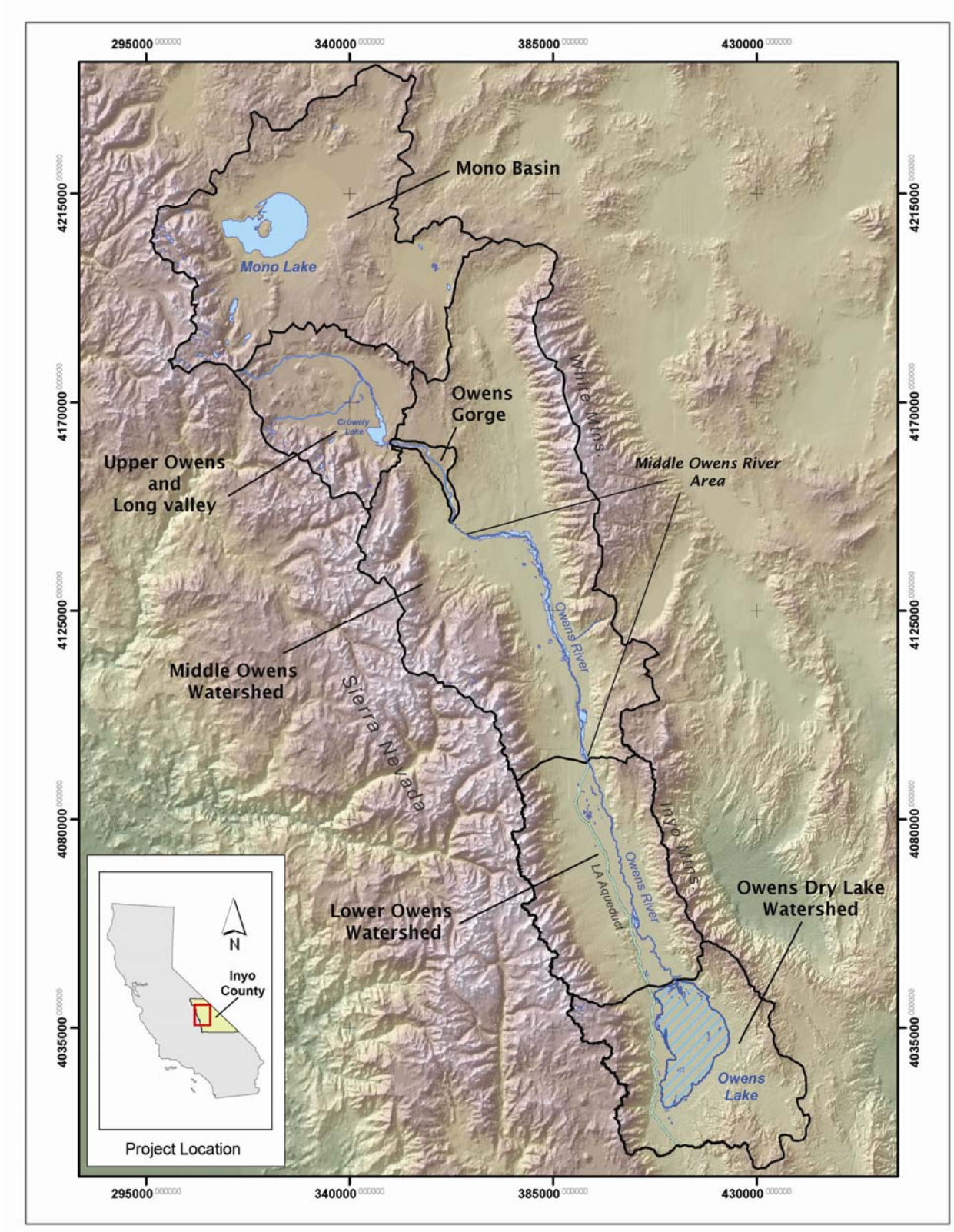
water to the Owens River or the LAA. Prior to the construction of the LAA, the Owens River drained to Owens Lake. Today, only a portion of the Owens River reaches the lake, as the majority of its flow is diverted into the LAA and transferred to southern California. However, under the LORP, a continuous baseflow of approximately 40 cubic feet per second (cfs) is maintained from the River Intake to the LORP pump station (located approximately 4.5 river miles upstream of the Owens River Delta). In addition, higher "pulse" and "seasonal habitat flows" are periodically released. Water diverted at the LORP pump station is conveyed to the Owens Lake Dust Control Mitigation Program or the LAA. In accordance with a July 1998 Memorandum of Agreement (MOA) between the City of Los Angeles and the Great Basin Air Pollution Control District, LADWP mitigates dust on Owens Lake. At full build-out of the proposed dust control measures, it is projected that water use for dust control will be approximately 95,000 AF/yr.

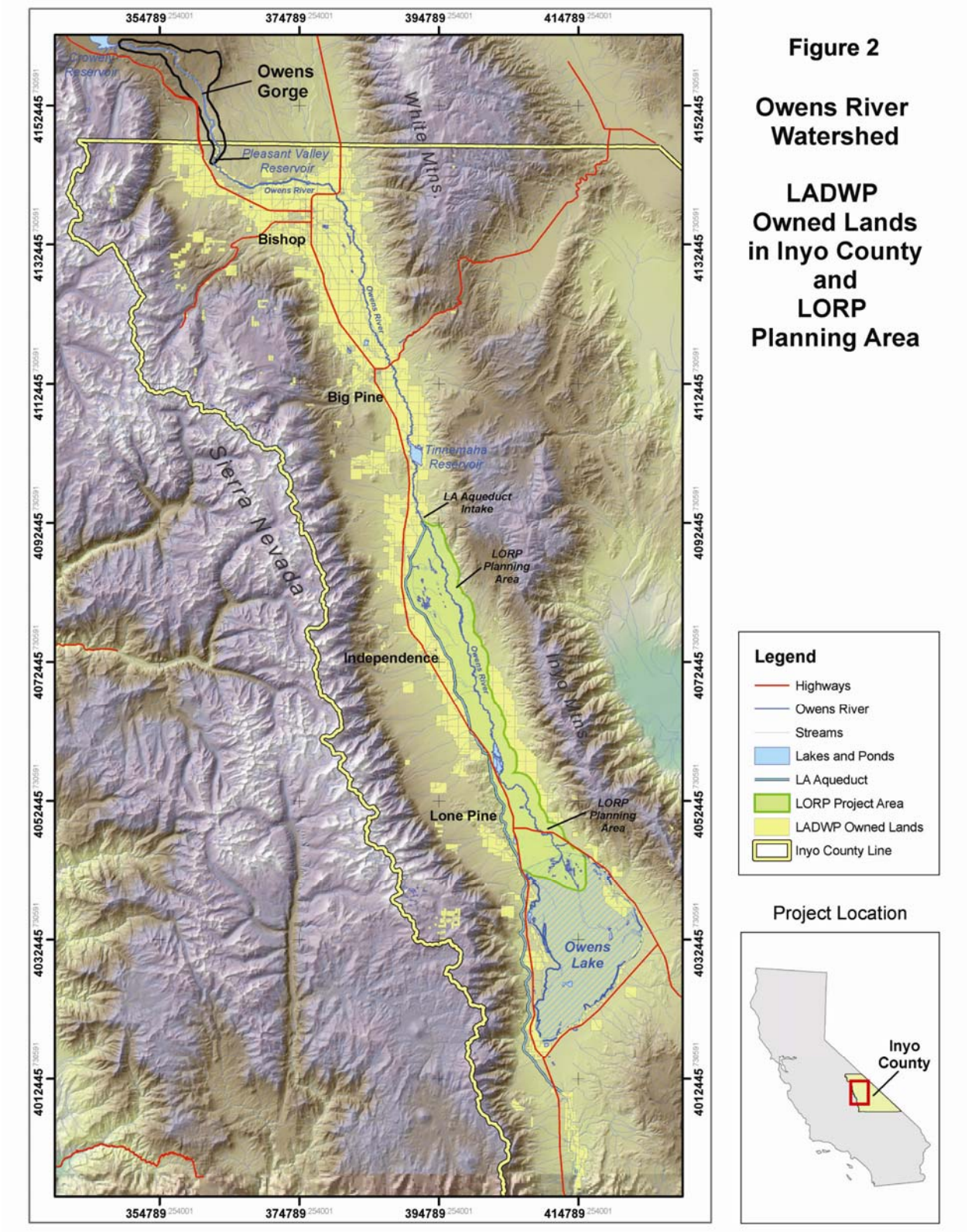
Historically, streams draining from the Sierra Nevada west of the Owens Valley fed the Owens River. Today, the few streams that do confluence with the Owens River occur primarily in the northern portion of the valley.

In the southern part of the valley, the LAA intercepts stream flows prior to their historic confluence with the Owens River. Many streams draining to the Owens Valley are vital to the LADWP's water delivery system to Los Angeles via the LAA. A few of these streams support hydroelectric facilities such as those at Cottonwood Creek, Big Pine Creek and Division Creek.

The valley is characterized as high desert, with vegetation controlled largely by the arid and semiarid conditions of the region, salinity of soil in many locations, and the presence of a shallow water table. Common vegetation communities are alkaline meadow, alkaline scrub, nonalkaline scrub and, where water is available, riparian and wetland communities.

**Figure 1**
**Owens River Watershed**

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4092445
4072445
4052445
4032445
4012445
Crowley Reservoir
Owens Gorge
Pleasant Valley Reservoir
Owens River
White Mtns.
Bishop
Big Pine
Tinnemaha Reservoir
LA Aqueduct Intake
LORP Planning Area
Sierra Nevada
Independence
Inyo Mtns.
Lone Pine
LORP Planning Area
Owens Lake
Figure 2
Owens River Watershed
LADWP Owned Lands in Inyo County and LORP Planning Area
Legend
Highways
Owens River
Streams
Lakes and Ponds
LA Aqueduct
LORP Project Area
LADWP Owned Lands
Inyo County Line
Project Location
Inyo County

## 1.4 PROJECT DESCRIPTION

### 1.4.1 River Management

River Management is Chapter 2 of the OVLMP. The River Management Plan encompasses the 63-mile (102 kilometer) riparian corridor along the Middle Owens River from Pleasant Valley Reservoir to the Los Angeles Aqueduct intake. There are 4,092 acres of riparian/wetland habitat (marsh, wet alkali meadow, riparian shrub, and riparian forest) within the riverine-riparian area of the OVLMP (WHA, 2004). The two most important management tools for the Middle Owens River ecosystem are stream flow and land use.

#### 1.4.1.1 Goals and Objectives

The River Management Plan was developed to meet the following MOU goals:

1. Continue to supply water to the City of Los Angeles.
2. Implement sustainable land management practices for agriculture (grazing) and other resource uses.
3. Continue to provide recreational opportunities on all LADWP-owned lands.
4. Improve biodiversity and ecosystem health (condition).
5. Protect and enhance habitat for T&E species.

The objectives that are applicable to the riverine-riparian area and are used to meet the goals identified in the MOU are:

1. Maintain existing average in-channel flows.
2. Allow for annual out-of-channel flows to maintain existing riparian/wetland habitats (manage the timing, magnitude, duration, and frequency of high river flows)
3. Initiate ramping rates to minimize rapid water level changes.
4. Implement grazing strategies within riparian and upland pastures.
5. Modify the location and intensity of recreational activities (in the riverine-riparian system).
6. Initiate habitat conservation strategies to enhance and protect T&E species habitat.
7. Monitor and use adaptive management through time.

#### 1.4.1.2 Management Practices

Flow has been managed in the Owens River, especially since the early 1900s, to provide water for the needs of the City of Los Angeles. With the completion of the LAA in 1913, LADWP began using the Owens River, specifically the reach from Pleasant Valley Reservoir to the LAA intake, as the northern extension of the aqueduct. Flow is released to the Owens River below Pleasant Valley Reservoir; average annual flow is 384 cfs. Downstream of the reservoir the Owens River flow is augmented by several creeks, ditch returns and canals; average annual flow just below Tinemaha Reservoir dam is 459 cfs. Flow fluctuations in the reach are dependent on LADWP operational needs rather than natural conditions. Thus, LADWP manages flow in the Owens River by ramping up the flow during times of high water demand and ramping down the flow during periods of low water demand. Ramping rates on the ascending limb of the hydrograph must not exceed 50 cfs per day, while ramping on the descending limb may not exceed 25 cfs. Ramping rate changes may be implemented to meet habitat and vegetation needs, as long as City of Los Angeles water needs are being met. Pulse flows in excess of 600 cfs are

released most years in April or May from Pleasant Valley Reservoir to prevent the reservoir from spilling. Pulse flows are not released in less than average water years. The objectives of the pulse flows are to scour stream banks and bars within the river channel and promote riparian and wetland plant development in the low floodplain areas adjacent to the river through inundation.

Under the OVLMP, LADWP will continue to manage ramping rates in the Owens River. The ramping rates described above allow LADWP to meet its water supply obligations and alleviates the huge fluctuations in flow that are detrimental to river systems.

### 1.4.2 Grazing Management

Grazing Management is Chapter 3 of the OVLMP. Grazing plans were developed to address livestock (cow/calf pairs, replacement heifers, bulls, horses, and mules) management issues and to develop guidelines for better watershed management. Lessees were consulted during development of the grazing management plans; approximately three meetings were held with each lessee. The MOU emphasizes the need to maintain sustainable levels of agriculture, livestock grazing, recreation, and other activities.

#### 1.4.2.1 Goals and Objectives

Grazing management plans for each of the leases to be covered by the OVLMP (**Figures 3** through **14**) were developed in consultation with lessees (**Table 2**) to meet the following MOU goals:

1. Implement sustainable land management practices for agriculture (grazing) and other resource uses.
2. Improve biodiversity and ecosystem health (condition).
3. Protect and enhance habitat for T&E species.

The objectives that are applicable to grazing management and meet the above stated goals as identified in the MOU are:

1. Implement grazing strategies within riparian and upland pastures.
2. Initiate habitat conservation strategies to enhance and protect threatened and endangered species habitat.
3. Monitor and use adaptive management through time.

**Figure 3**
**Grazing Lease Map Series**

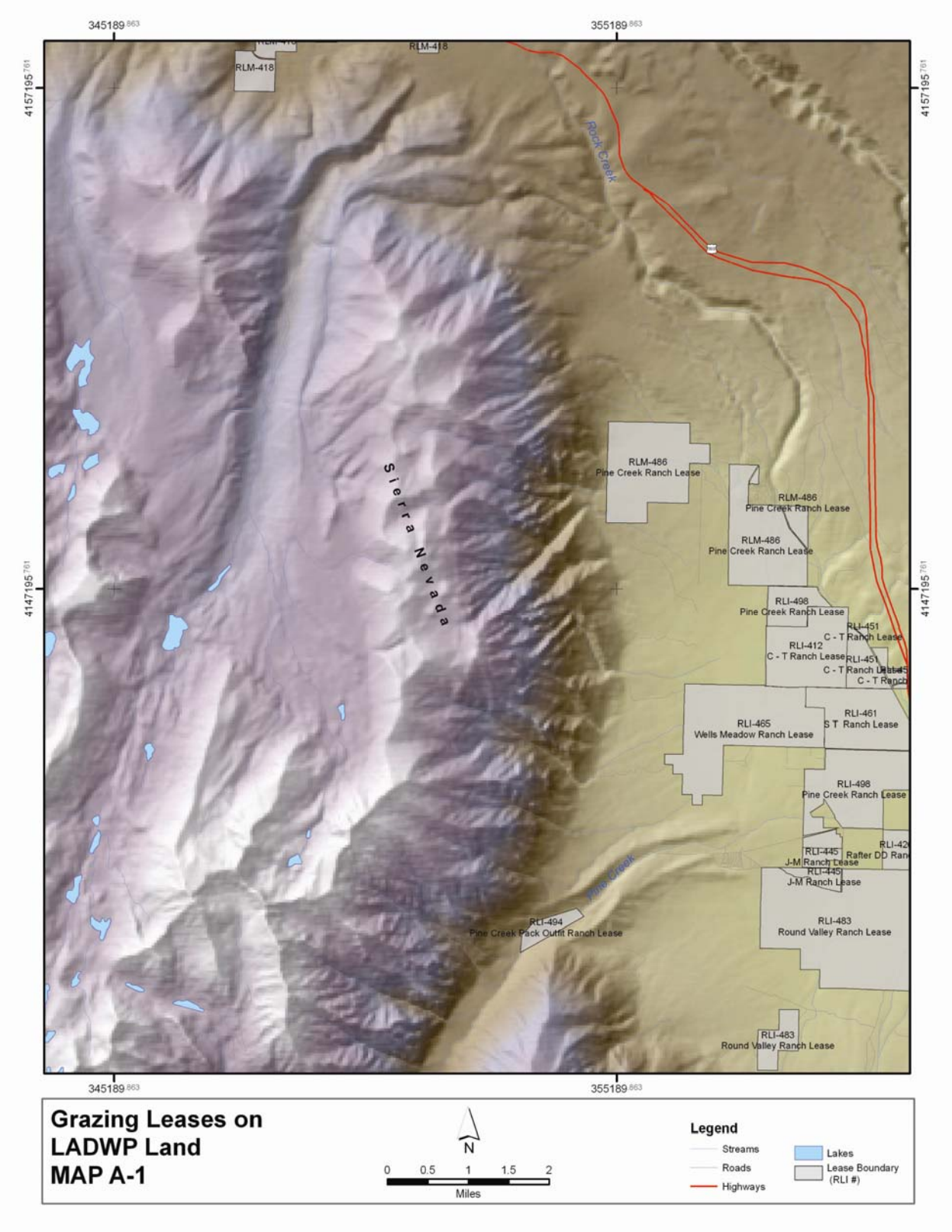
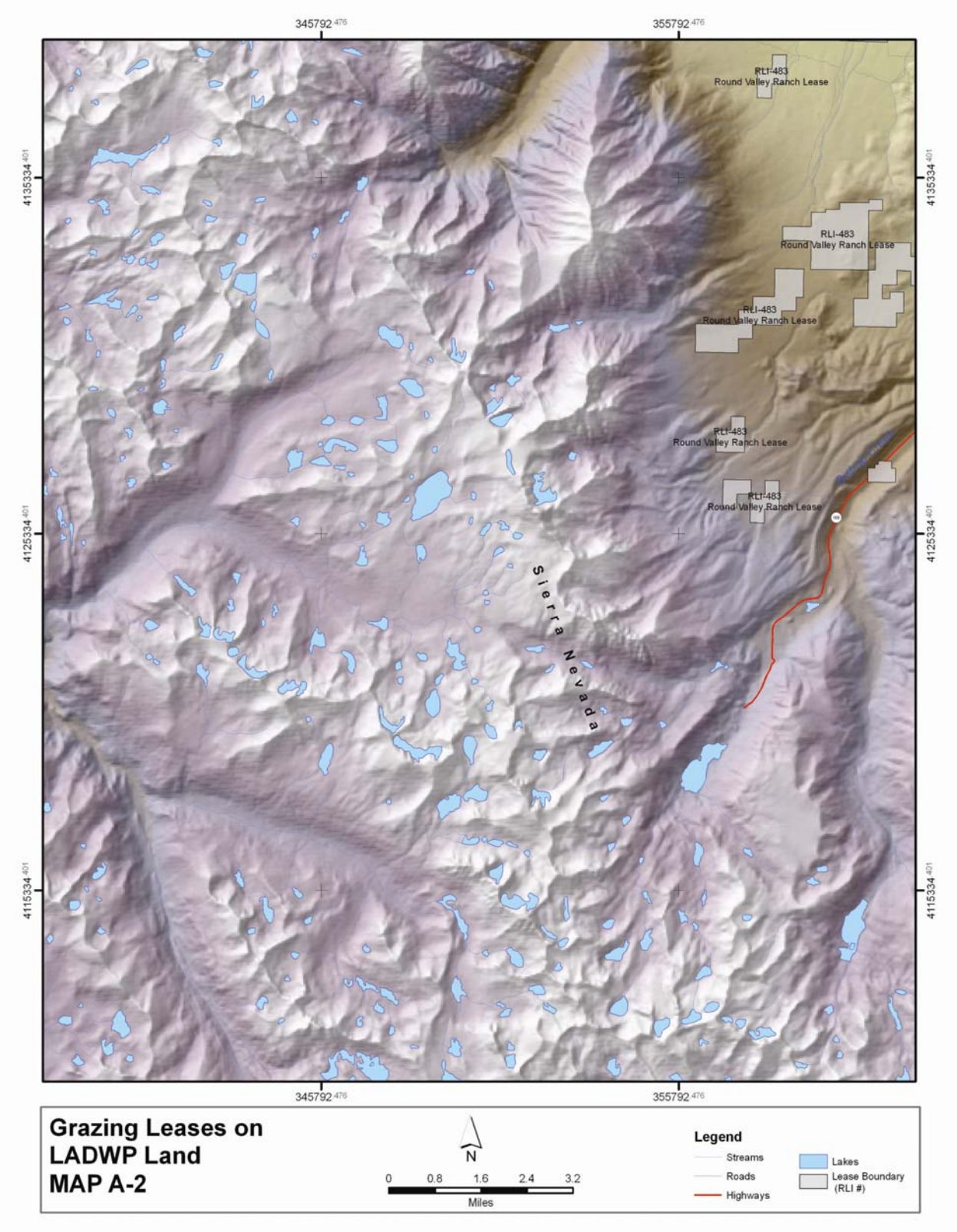


**Figure 4**
**Grazing Lease Map Series**



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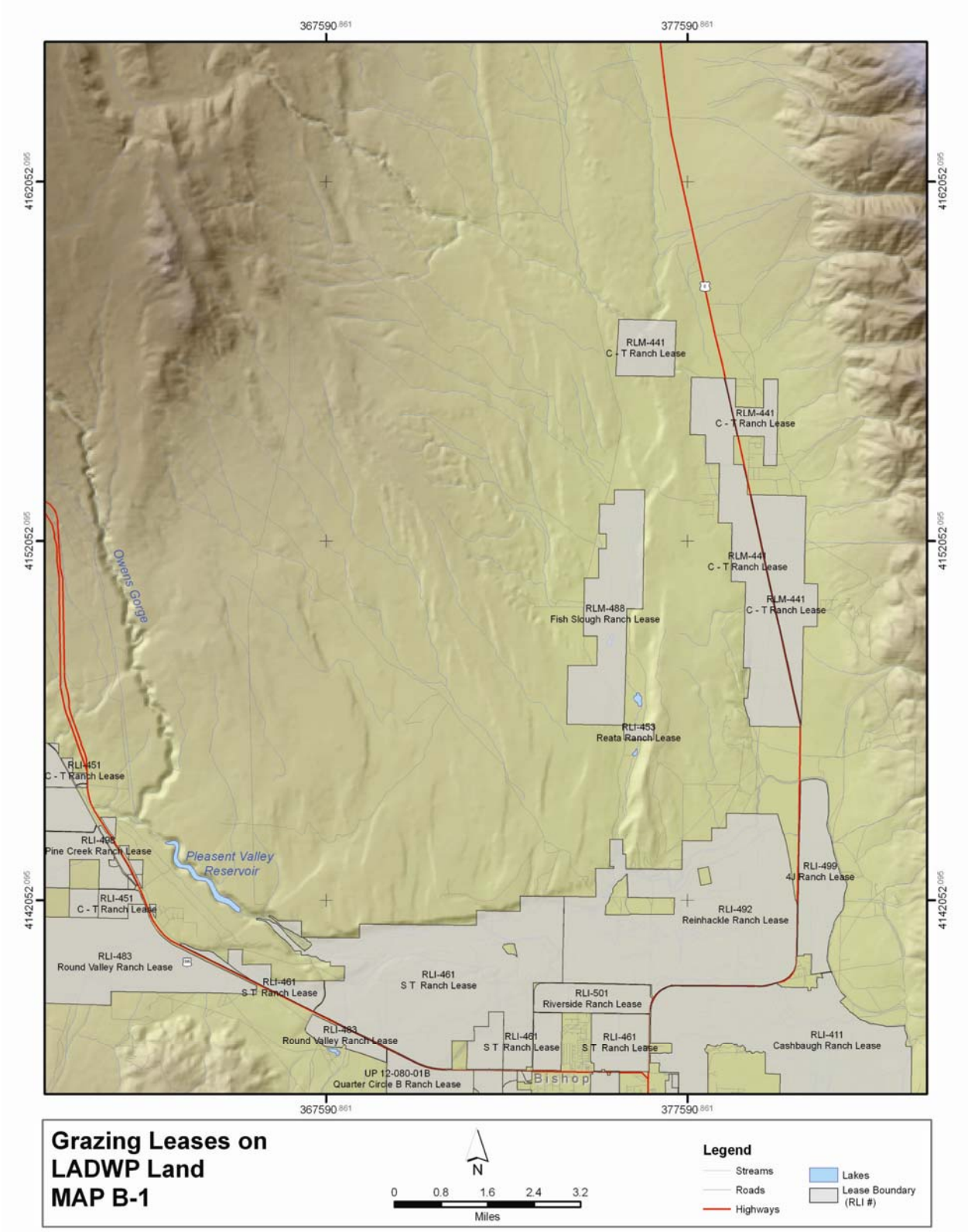
**Grazing Lease Map Series**



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**Grazing Lease Map Series**

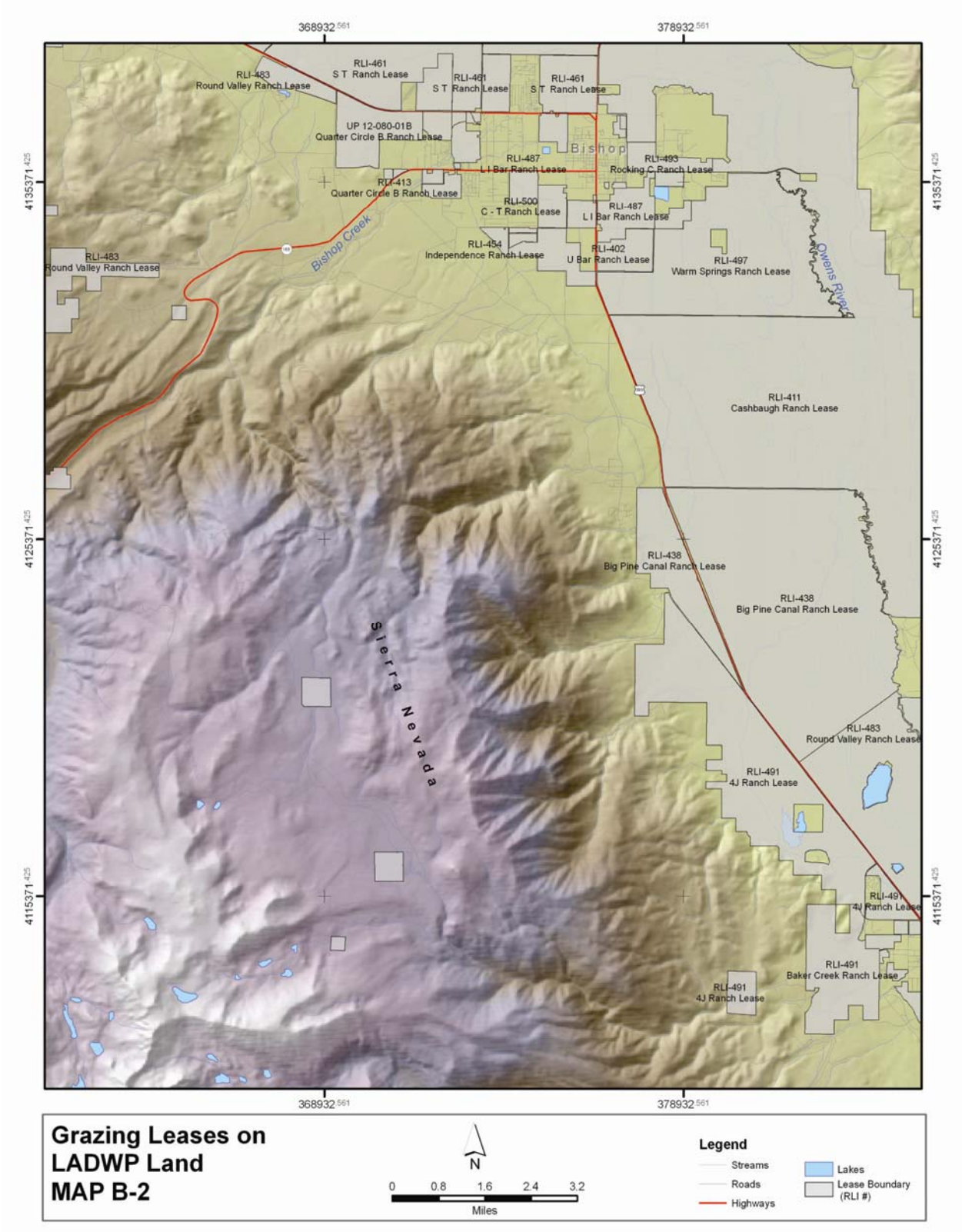


**Figure 7**
**Grazing Lease Map Series**

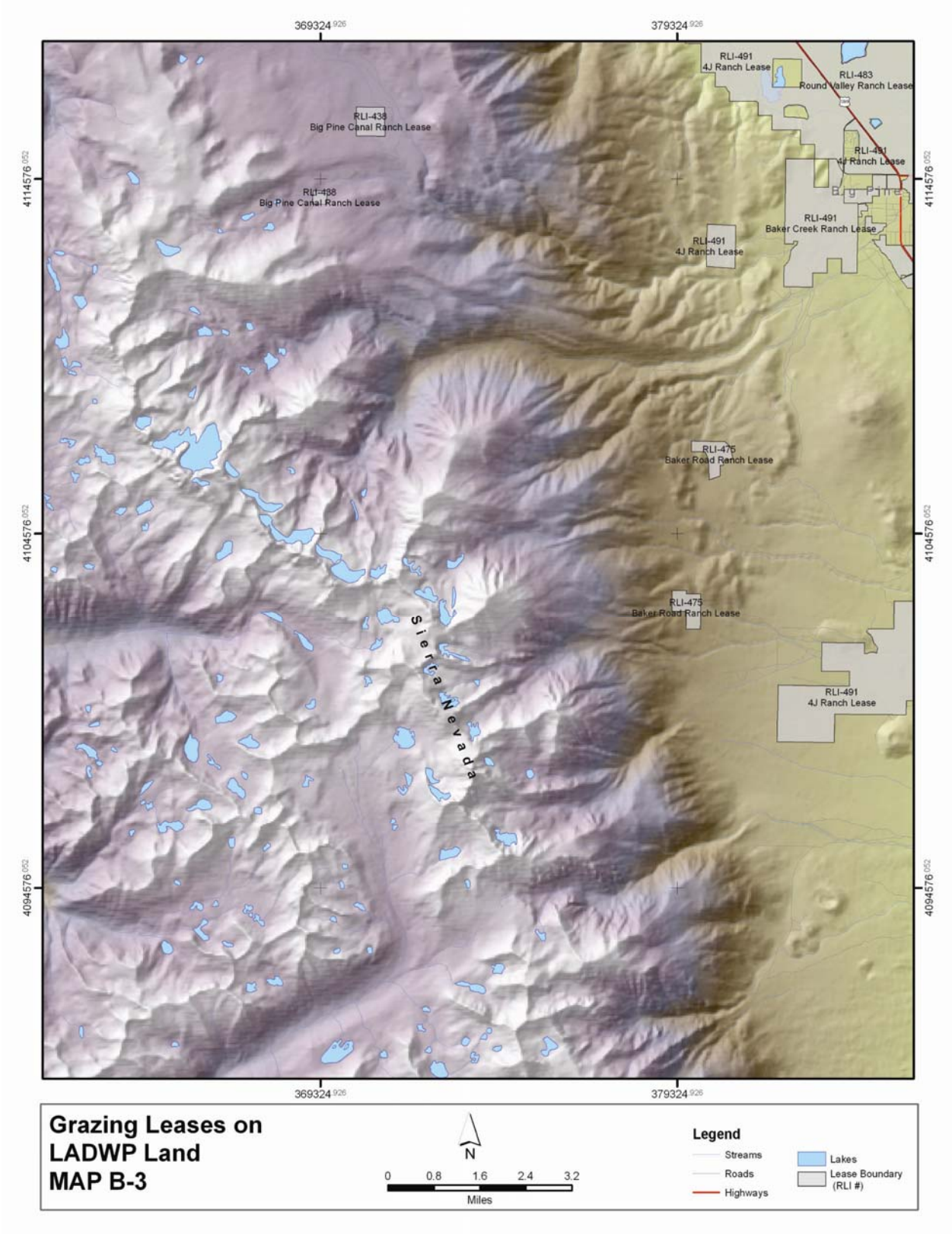


**Figure 8**
**Grazing Lease Map Series**

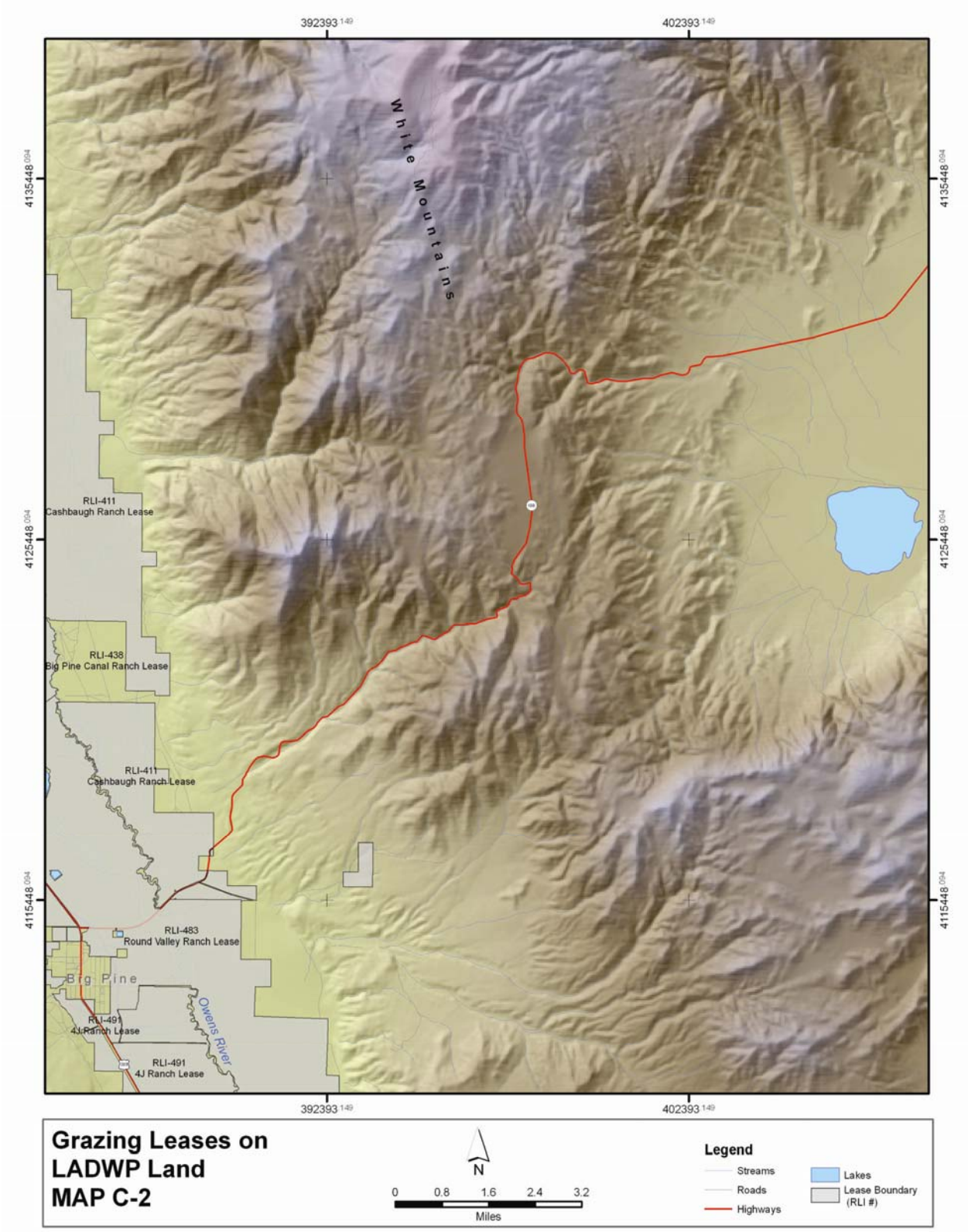


**Figure 9**
**Grazing Lease Map Series**

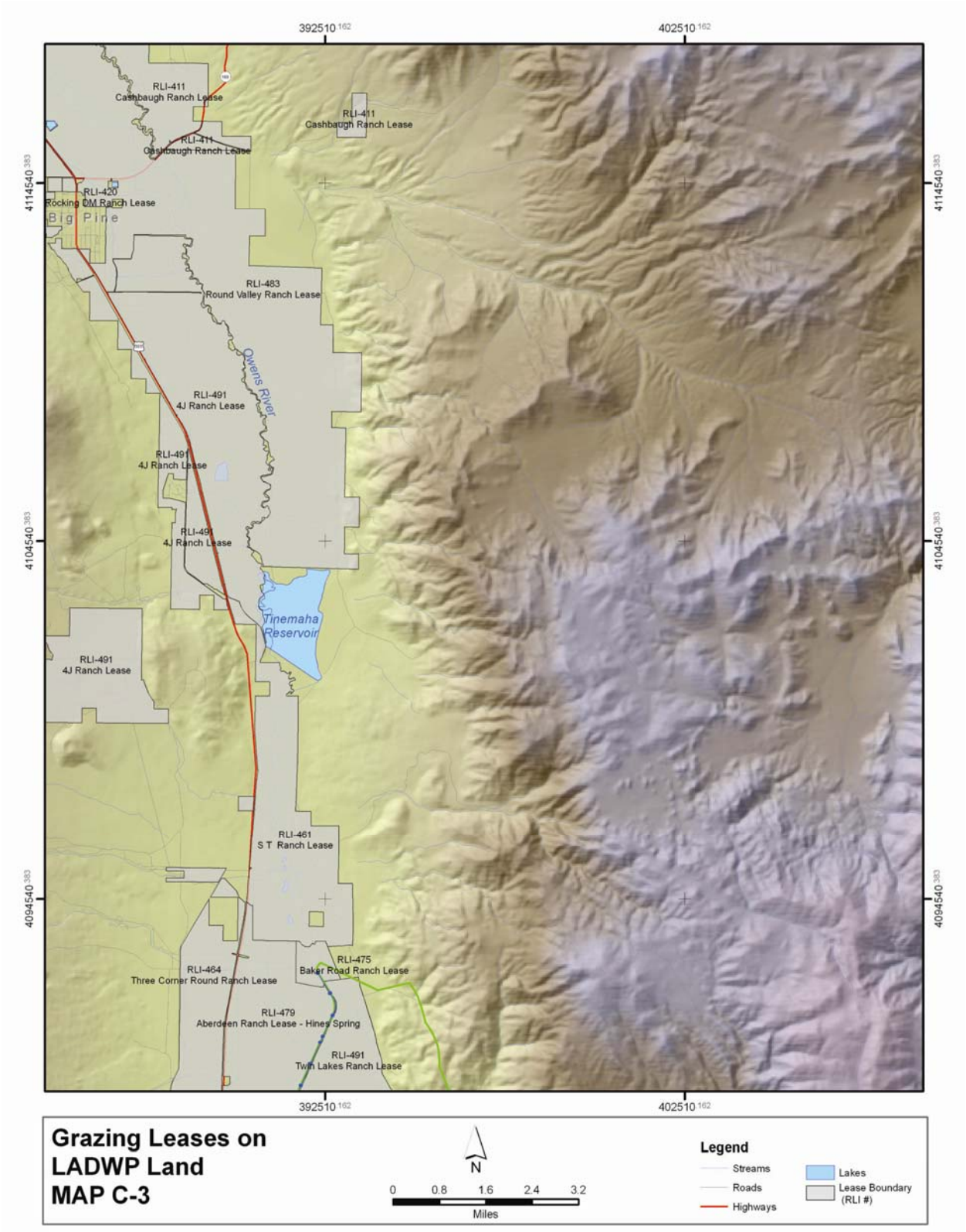


**Figure 10**
**Grazing Lease Map Series**

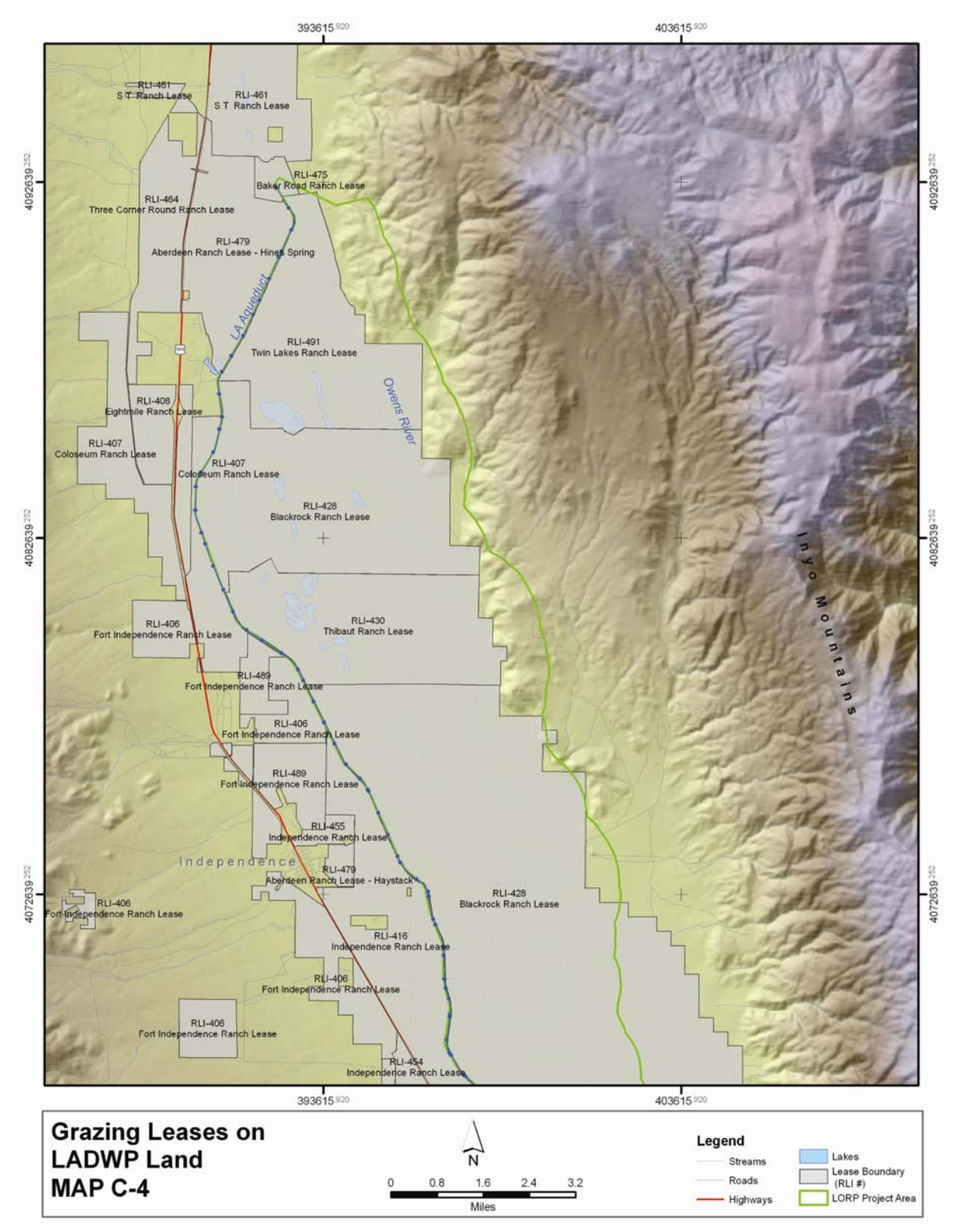


**Figure 11**
**Grazing Lease Map Series**

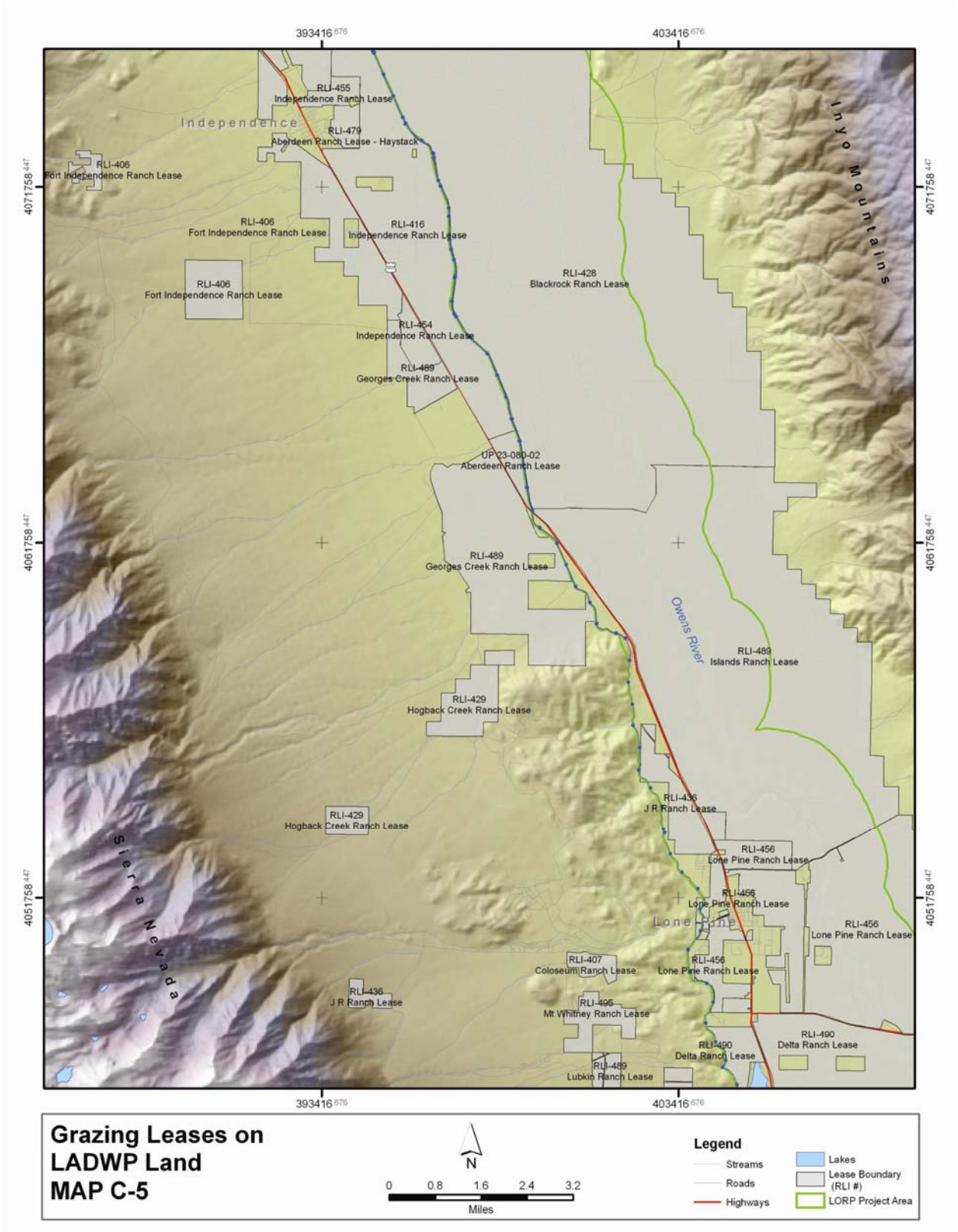


**Figure 12**
**Grazing Lease Map Series**

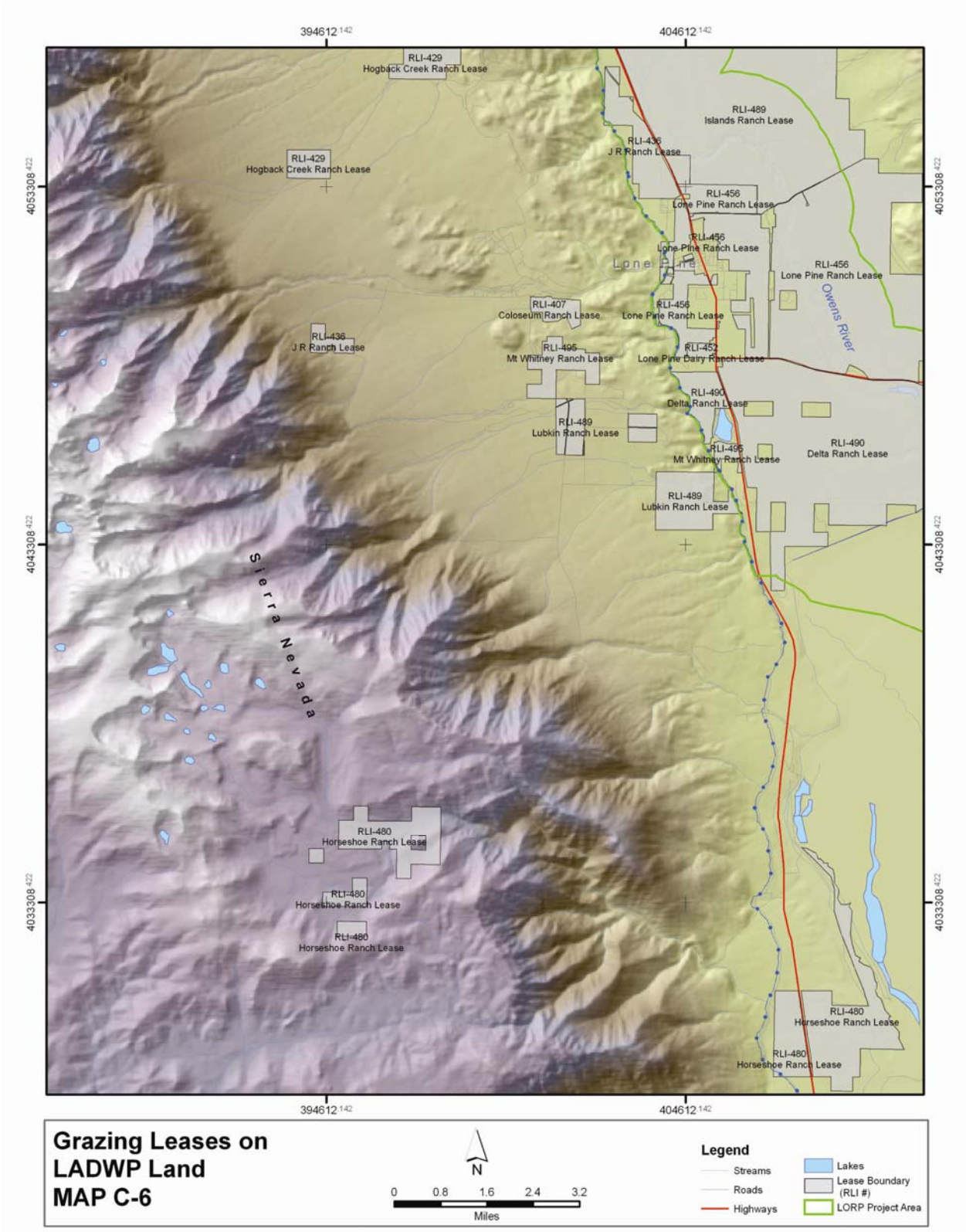


**Figure 13**
**Grazing Lease Map Series**

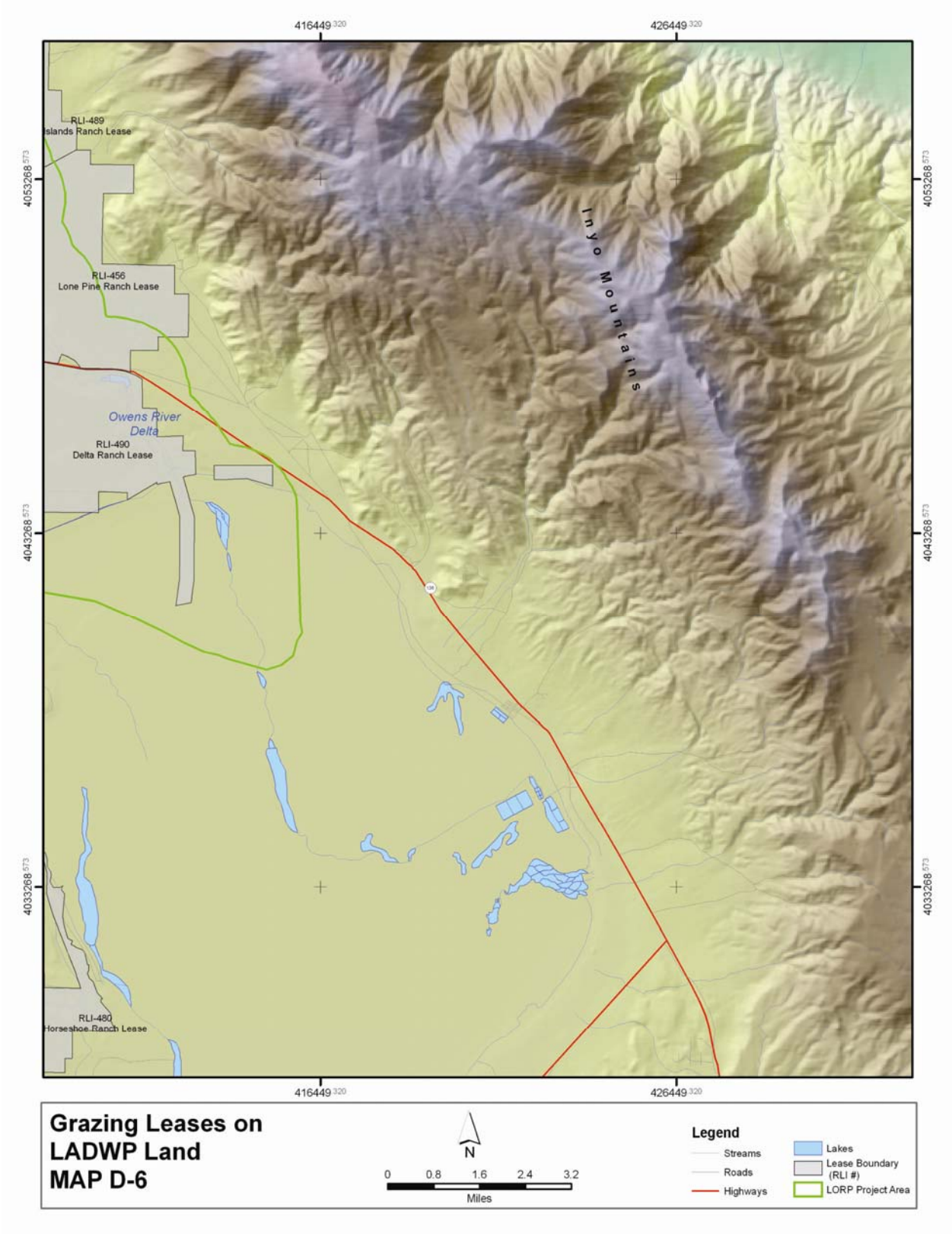


**Figure 14**
**Grazing Lease Map Series**

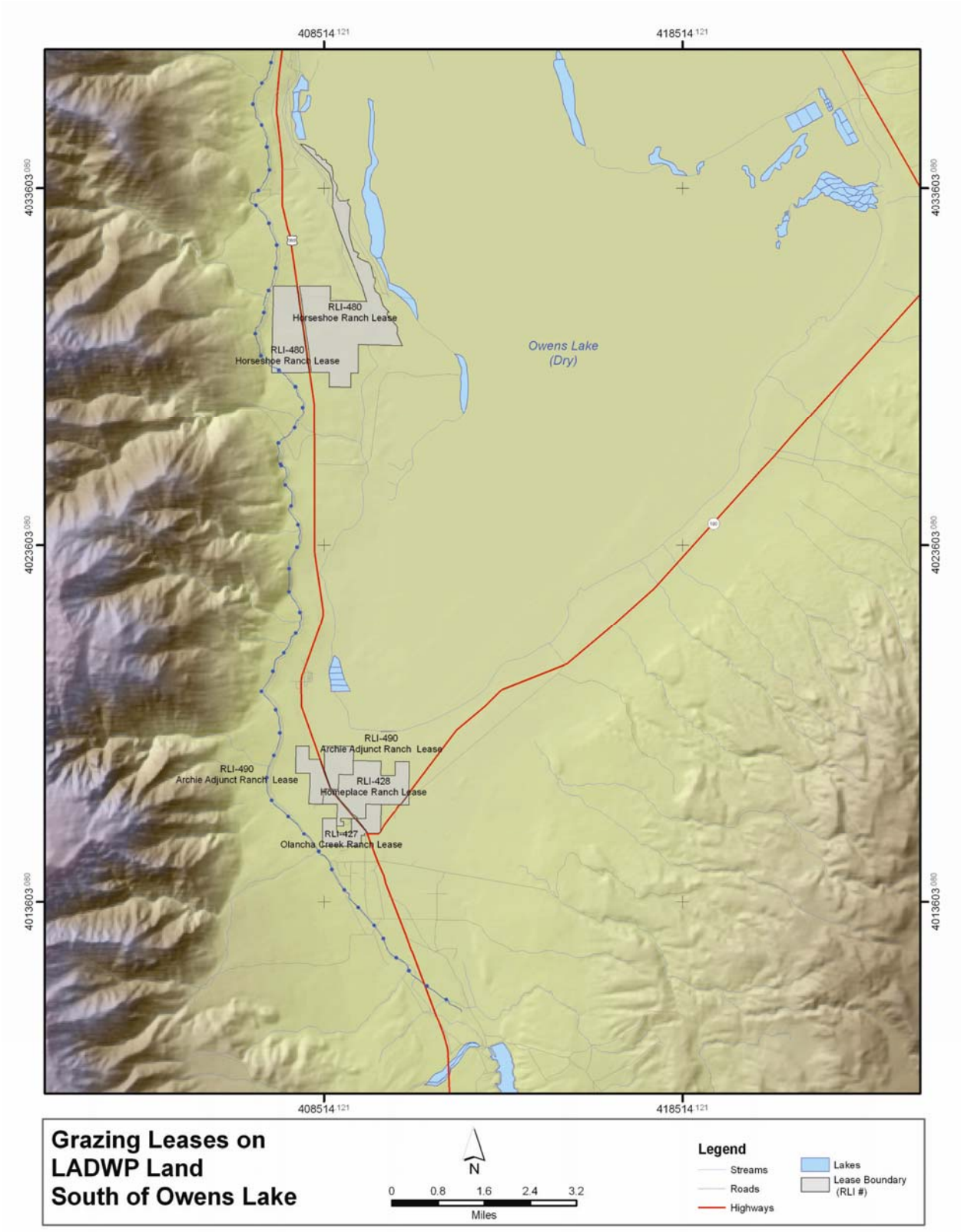


**Table 2**
**LADWP Lessees in Inyo County**

| Lease Name | Lease No. | Acres | Lessee(s) | Grazing Management Measures (Brief Summary) |
|---|---|---|---|---|
| 3V Ranch Livestock Grazing Lease | RLI-435 | 33 | Kenneth, Kenny, and Barbara Partridge and Venneta Johnson; managed by Kenneth and Kenny Partridge | Best Pasture Rotation Grazing Strategy (BPRGS), livestock supplements |
| 4-J Ranch Livestock Grazing Lease | RLI-491, RLI-499 | 20,800 | 4-J Cattle Company, Inc.; managed by Mark Johns | BPRGS, grazing timing restrictions, fence replacement at the Locust Grove Spring exclosure (includes walk-through gate) |
| Aberdeen Livestock Grazing Lease | RLI 479 | 3,077 | Dennis Winchester | New exclosure as per the Additional Mitigation Projects Developed by the MOU Ad Hoc Group (2008), grazing timing restrictions, BPRGS |
| Archie Adjunct Livestock Grazing Lease | RLI-490 | 426 | Scott Kemp | Grazing timing restrictions |
| Baker Creek Livestock Grazing Lease | RLI-491 | 1,426 | 4-J Cattle Company, Inc.; managed by Mark Johns | New fencing, creation of riparian and spring exclosures, and grazing restrictions as described in the Final Ad Hoc Yellow-Billed Cuckoo Habitat Enhancement Plan (LADWP, 2009) |
| Baker Road Ranch Livestock Grazing Lease | RLI-475 | 391 | Murton Stewart, Jr. and Jean Stewart; managed by Murton Stewart, Jr. and Murton Stewart III | Grazing timing and plant utilization restrictions, fencing of head springs to create exclosures, stockwater in meadows, fencing to separate LADWP property from USFS allotment (constructed to allow wildlife safe access to springs) |
| Big Pine Canal Livestock Grazing Lease | RLI-438 | 9,177 | Ron Yribarren | BPRGS, grazing timing restrictions, livestock supplements, minor fence maintenance, new windmill in the Canal Field to provide stockwater, new cattle guard at Collins Road |
| Brockman Ranch Livestock Grazing Lease | RLI-401 | 183 | Dick Moxley | New fencing in Field #8 to create a riparian pasture, BPRGS |
| C-T Ranch Livestock Grazing Lease | RLI-412, RLI-451, RLI-500, RLM-441 | 4,766 | William, Sharon, Thomas and Laura Talbot; managed by Mickey Jarvis and Dick Weller. | Grazing timing restrictions, new fencing to create riparian exclosures to protect Rock Creek in Pasture A of the Roberts Ranch Parcel and in the SW corner of Bull Pasture, BPRGS, livestock supplements, possible new stockwater source in Bull Pasture |

| Lease Name | Lease No. | Acres | Lessee(s) | Grazing Management Measures (Brief Summary) |
|---|---|---|---|---|
| Cashbaugh Livestock Grazing Lease | RLI-411 | 23,602 | James W. Cashbaugh, Dorothy Cashbaugh, James A. Cashbaugh and Alonna Giacomini; managed by Gary Giacomini, James W. Cashbaugh and James A. Cashbaugh | Grazing timing restrictions and management in compliance with the Conservation Strategy for the Southwestern Willow Flycatcher, new fences to create exclosure at Uhlmeyer Spring and new fences for riparian pastures along the river if necessary, reconstructed fencing along East Collins Road with new cattle guards, additional stockwater facilities |
| Coloseum Livestock Grazing Lease | RLI-407 | 2,645 | Rod Ayers | Grazing timing restrictions, new fencing (1,500 ft) to divide the pasture, BPRGS, fencing for two spring-seep areas, new stockwater facilities, improvements to the drift fence in West Pasture, new cattle guards, new fencing around the monitoring sites |
| Eight Mile Livestock Grazing Lease | RLI-408 | 770 | John Ketcham; managed by Mr. and Mrs. Lee Roeser | Grazing timing restrictions, livestock supplements, deferred two-pasture rotation grazing strategy in Alfalfa and Yearling Fields, new fence to divide South field, new sprinkler irrigation in Laws Pastures, BPRGS in Upper North, Lower North, and West Fields |
| Fort Independence Ranch Livestock Grazing Lease | RLI-406, RLI-489, RLI-454 | 5,375 | Keith and Eleanor Bright, Donald Bright, and Scott Kemp; managed by Scott Kemp | Grazing timing restrictions, BPRGS |
| Georges Creek Parcel Livestock Grazing Lease | RLI-489 | 4,025 | Scott Kemp | Grazing timing restrictions, new fencing to create a riparian pasture at Georges Creek, Arizona stream crossing to provide stockwater |
| Hogback Creek Livestock Grazing Lease | RLI-429 | 910 | Red's Meadow Pack Station | New fencing, fencing repair, and grazing restrictions as described in the Final Ad Hoc Yellow-Billed Cuckoo Habitat Enhancement Plan (LADWP, 2009) |
| Homeplace Adjunct Livestock Grazing Lease | RLI-428 | 587 | Lacey Livestock; managed by Mark Lacey | Grazing timing restrictions, BPRGS |
| Horseshoe Bar Ranch Livestock Grazing Lease | RLI-462 | 336 | Don, Jim, and Lee Tatum; managed by Jim Tatum | Weed eradication, ditch improvements, and vegetation mowing on-going |
| Horseshoe Livestock Grazing Lease | RLI 480 | 3000 | Roy Hunter | Grazing timing restrictions and forage utilization standards, new stockwater facilities near Polymer Plant |
| Independence Livestock Grazing Lease | RLI-416, RLI-454, RLI-455 | 5,268 | Shepherds Creek Parcel held by Zachary Smith; Springfields Parcel held by John and Tansy Smith | New fencing to separate Middle Field, grazing timing restrictions, new fence in the Springfields Parcel to protect riparian habitat |

| Lease Name | Lease No. | Acres | Lessee(s) | Grazing Management Measures (Brief Summary) |
|---|---|---|---|---|
| J-M Ranch Livestock Grazing Lease | RLI-445 | 152 | Jim Coats | BPRGS |
| JR Ranch Livestock Grazing Lease | RLI-436 | 976 | Ralph Ruiz | Herd size and grazing timing restrictions, changes in fertilizer application, upland vegetation utilization standards, fence repairs |
| Giacomini Trust | RLI-487 | 681 | Gary E. Giacomini and Alonna M. Giacomini | Grazing timing restrictions, BPRGS |
| Lone Pine Dairy Livestock Grazing Lease | RLI-452 | 80 | Lewis W. Schou, Robert D. Munis, and Phyllis L. Munis; managed by Lewis Schou | BPRGS |
| Lubkin Adjunct Livestock Grazing Lease | RLI-489 | 1,182 | Scott Kemp | New fencing to enclose springs and exclude livestock grazing, grazing timing restrictions and forage utilization standards, blocking or locking of gates |
| Mandich Ranch Livestock Grazing Lease | RLI-424 | 168 | Chance Rossi, Holly Rossi, Michael Rossi, and Yvette Hannon | BPRGS |
| Mount Whitney Ranch Livestock Grazing Lease | RLI-495 | 626 | Craig London | Grazing timing restrictions, livestock supplements |
| Olancha Creek Adjunct Livestock Grazing Lease | RLI 427 | 269 | Tom Noland | Grazing timing restrictions, BPRGS |
| Pine Creek Pack Outfit Livestock Grazing Lease | RLI-494, RLI-466 | 267 | Brian and Danica Berner | Grazing timing restrictions and forage utilization standards |
| Pine Creek Ranch Livestock Grazing Lease | RLI-498, RLM-486 | 2,632 | Emilio Collado and Lorenzo Iturriria; managed by Emilio Collado | BPRGS, relocation of corrals, modifications to reduce excess pasture irrigation from Pine Creek |
| Quarter B Circle Ranch Livestock Grazing Lease | RLI-404, RLI-413 | 1,250 | Dan Boyd and Troy Oney | Grazing timing restrictions, BPRGS |
| Rafter DD Ranch Livestock Grazing Lease | RLI-426, RLI-439 | 240 | Dave Dohnel and Kent Dohnel; managed by Kent Dohnel | Grazing timing restrictions, BPRGS |
| Rainbow Pack Outfit Livestock Grazing Lease | RLI-460 | 144 | Greg Allen; managed by Greg and Ruby Allen | Grazing timing restrictions including specified non-use periods, forage allowable use standards |
| Reata Ranch Livestock Grazing Lease | RLI-453 | 139 | Kathleen Hadeler, Amanda Miloradich, and John McMurtrie; managed by John McMurtrie | Grazing timing restrictions, BPRGS, reconstruction of fencing for riparian exclosure at North Fork Bishop Creek |

| Lease Name | Lease No. | Acres | Lessee(s) | Grazing Management Measures (Brief Summary) |
|---|---|---|---|---|
| Reinhackle Ranch Livestock Grazing Lease | RLI-492 | 5,947 | Lacey Livestock; managed by Mark Lacey and Leo Hertz. | Grazing timing restrictions, three-pasture double-rest rotation grazing strategy, new fencing for a new riparian pasture in Laws Field and on the south side of the Owens River, possibly new stockwater facility |
| Riverside Ranch Livestock Grazing Lease | RLI-501 | 613 | Fred Aubrey | BPRGS, upland utilization standards, fence repair |
| Rockin C Ranch Livestock Grazing Lease | RLI-493 | 320 | Cathy Caballero | Grazing timing restrictions |
| Rockin DM Ranch Livestock Grazing Lease | RLI-420 | 110 | Don Morton; managed by Don and Bev Morton | Grazing timing restrictions and upland utilization standards |
| Round Valley Ranch Livestock Grazing Lease | RLI-483 | 19,780 | Joe C. Mendiburu, Danielle Mendiburu and Nicole Dobrzanski; managed by Joe Mendiburu | Grazing timing restrictions including resting portions of the lease, riparian and upland utilization standards, relocation of corrals, fence repairs and installation of cattle guards, new fencing for riparian pastures to protect Southwestern Willow Flycatcher |
| S-T Ranch Livestock Grazing Lease | RLI-461 | 10,925 | Jack and Todd Tatum | BPRGS, herd size and grazing timing restrictions, forage utilization standards, fence repair, new fence along Aberdeen Station Road, improved irrigation practices, improved pasture maintenance, re-delineation of lease boundary (to remove campground and Spawning Channel Riparian Field), removal of unused fences (Bogie Field) |
| Three-Corner-Round Ranch Livestock Grazing Lease | RLI-464 | 681 | Three-Corner-Round Pack Outfit; managed by Jennifer Roeser | Grazing timing restrictions, new fencing in upland fields, livestock supplements, new water trough |
| U-Bar Ranch Livestock Grazing Lease | RLI-402 | 404 | Alice J., Roy and Beverly Boothe | BPRGS |
| Warm Springs Livestock Grazing Lease | RLI-497 | 4,200 | Giacomini Trust; managed by Gary and Alonna Giacomini | Grazing timing restrictions, livestock supplements |
| Wells Meadow Ranch Livestock Grazing Lease | RLI-465 | 1,041 | Stanley and Kay Voget, and Don Perea; managed by Don Perea | Grazing timing restrictions |

#### 1.4.2.2 Best Management Practices

The grazing management plans identify and describe the Best Management Practices (BMPs) that will be implemented to reduce the impacts from livestock grazing and maintain a healthy watershed. Different management strategies (also referred to as measures or actions) that may be implemented on the grazing leases are described in the grazing management plans and are:

1. Implement Best Management Practices.
2. Manage livestock using the "Best Pasture Rotation Grazing Strategy".
3. Implement grazing utilization standards. For upland vegetation, the maximum average herbaceous plant utilization ranges from 50 percent (grazing during plant active growing period) to 65 percent (grazing during plant dormancy period). Riparian pastures can be grazed until 40 percent of herbaceous forage utilization (including elk use), or until the end of the grazing period, whichever occurs first.
4. Do not allow livestock grazing in riparian habitat areas along the Owens River corridor from May 1 to October 1 as per direction in the *Conservation Strategy for the Southwestern Willow Flycatcher* (LADWP, 2005).
5. In areas that contain rare plant species, prevent livestock grazing during flowering periods.
6. Implement grazing exclosures.
7. Install fences to control the movement of livestock herds.
8. Construct fences to protect riparian trees and springs and seeps.
9. Reduce herd size.
10. Improve the maintenance of irrigation ditches and head gates.
11. Apply improved and more intensive irrigation practices.
12. Improve pasture maintenance practices, including mowing, dragging, and fertilization.
13. Implement Remedial Pasture Grazing Prescriptions (RPGP).
14. Provide supplemental feed when necessary to control herbaceous utilization and keep riparian, uplands, and irrigated pastures in healthy condition.

Over time, the BMPs outlined in the grazing plans will be refined, as needed, through adaptive management to meet OVLMP goals.

### 1.4.3 Recreation Management

Recreation Management is Chapter 4 of the OVLMP. City-owned lands are largely open for public recreational use and offer a wide array of recreational opportunities for residents and visitors to the Owens Valley including: rock climbing, fishing, hunting, hiking, biking, Off-Highway Vehicle (OHV) driving, and wildlife viewing. Under the OVLMP, these uses will be managed to limit impacts, and preserve the semi-primitive recreational experience that visitors and local residents enjoy.

### 1.4.3.1 Goals and Objectives

Recreation management measures are designed to meet the following MOU goals and objectives:

1. *Continue to provide recreational opportunities on all LADWP-owned lands*. The Recreation Management Plan will continue to provide public access to LADWP lands and support the local tourist economy, and be managed for multiple uses, while maintaining a diversity of quality recreational opportunities.

2. *Implement sustainable land management practices for agriculture (grazing) and other resource uses.* The Recreation Management Plan will consider the need to maintain irrigated meadows/pastures in good to excellent condition (as specified in the Grazing Management Plans), and safeguard and minimize impacts to cultural resources.

3. *Improve biodiversity and ecosystem health (condition).* The Recreation Management Plan will implement actions to protect and/or restore riparian areas to minimize erosion, improve bank stability, optimize water quality benefits, and enhance plant biodiversity.

4. *Protect and enhance habitat for threatened and endangered species.* This plan will provide for the protection of wildlife and sensitive plant species in riparian areas, meadows, and other locations of importance.

The objectives that were developed for the Recreation Management Plan to meet MOU goals are:

1. Modify the location and intensity of recreational activities.
2. Maintain a natural environment with minimal development to benefit the recreational experience on LADWP lands.
3. Monitor and use adaptive management through time.

### 1.4.3.2 Recreation Management Measures

Recreation management tools to be implemented on a site-specific basis are detailed in the OVLMP (Section 4.3) and summarized in **Table 3**. The Recreation Management Plan builds off information obtained during a series of public interviews and focus group meetings (hunters, fishermen, rock climbers) held during development of the OVLMP.

**Table 3**
**OVLMP Recreation Management Tools**

| | |
|---|---|
| ***Educational Tools*** | ▪ Post signage to inform users of relevant policies, especially where repeated violations occur. These may include signage to designate camping areas, OHV-use, hunting, protected areas, etc. |
| | ▪ Install kiosks in key locations to display Department policies and other useful information. These may be placed near popular intersections, parking areas, or access points. |
| | ▪ Produce brochures or flyers to educate recreational users on LADWP policies, access points, and opportunities and make available in community locations. |
| | ▪ Post Department Recreation Policies on the LADWP website. |
| | ▪ Host volunteer events to facilitate the cleanup of waste on LADWP property. |
| ***Active Management Tools*** | ▪ Install barriers, such as fencing, boulders and gates to redirect user patterns or prevent access to sensitive resources (e.g., boulders may be placed in closed roadways, fencing may be installed along the riparian corridor, etc.). |
| | ▪ Create designated parking areas, if necessary, to maintain access to recreation areas and to direct users away from sensitive resources. |
| | ▪ Create walkthrough structures (and possibly trails) in key locations to allow continued recreational access and to deter users from damaging sensitive resources. |
| | ▪ Close roads that are rarely used or that are damaging natural or cultural resources on Department lands based on a Roads Analysis. |
| | ▪ Create sanitation facilities if or when usage becomes too high, and waste/sanitation becomes a problem. |
| ***Regulatory Tools*** | ▪ Contact the Fish and Game Warden to handle any violations of Fish and Game Codes (e.g., unauthorized hunting or fishing, rare plant disturbance, or wildlife harassment). |
| | ▪ Notify local law enforcement (Inyo County Sheriff's Department) for any violations of LADWP policies and livestock harassment. |
| | ▪ Seek new county ordinances to enforce no camping policy on LADWP property. |

### 1.4.3.3 Proposed Recreation Projects

In areas where recreational use is causing resource damage, projects are on-going or proposed to improve conditions:

- Riparian fencing between Pleasant Valley Reservoir and Hwy 6 – on-going activity that includes fencing, designated parking areas, walkthrough access points, boulders or other barrier devices to obstruct direct vehicular access to the River, and information signs.
- Fencing, parking areas, and sign installation at Hwy 6 and Owens River – fencing installation will be consistent with the Grazing Management Plans for leases in this area. Closed roadways may be ripped and/or seeded to encourage revegetation.
- Parking area and road modifications at the Owens River and East Line Street, Warm Springs Road, Hwy 168 and Stewart Lane – installation of barriers to prevent vehicles parking directly on the streambanks.

- Parking area improvements, road closure and sign installation along Owens River south of Tinemaha Reservoir - installation of barriers to prevent vehicles parking directly on the streambanks, signage, and potentially ripping and/or reseeding to stabilize banks.
- Fencing installation and road improvements along certain parts of the Owens River to LAA intake - installation of barriers to prevent vehicles parking directly on the streambanks to be phased over time.
- OHV management and signage off Reata Lane southwest of Bishop.
- Cooperate with Bureau of Land Management (BLM) and U.S. Forest Service (USFS) agencies to implement road and campsite management strategies in the Buttermilk area – potential installation of barriers to restrict camping access, signage and information kiosk, and removal of fire rings.
- Coordinate with Inyo County to install trash and potable sanitary facilities at Klondike Lake.

### 1.4.4 Cultural Resources Management

Cultural Resources Management is Chapter 6 of the OVLMP. A Class III heritage resource survey and report was prepared for the riparian corridor of the Middle Owens River (McCombs, 2006). The heritage resource survey identified 45 heritage sites located partly or wholly in the Middle Owens River riparian corridor. Of these sites 12 are prehistoric, two are multi-component (prehistoric and historic), and 31 are historic. A records search of both the riparian survey area and a wider 15,000-acre Middle Owens River area was conducted by the Eastern Information Center of the California Historical Resources Information System at the University of California, Riverside. The majority of the 15,000 acres has not been surveyed for heritage resources. Site records exist, however, for numerous heritage sites located within or very near the Middle Owens River area. The sites demonstrate that the Middle Owens River area has been intensively used over time.

Prior to the field investigations the following Tribes in Inyo County were consulted:

- February 8, 2006 in Benton; Joseph Saulque, Tribal Administrator for the U-te Ute Gwaitu Paiute Tribe.
- February 8, 9, 13, and 14, 2006 in Bishop; Lee Chavez, Tribal Historic Preservation Officer (THPO) for the Bishop Paiute Tribe.
- February 9, 2006 in Big Pine; Irving Lent, Tribal Administrator for the Big Pine Paiute Tribe of Owens Valley. Bill Helmer, THPO, was unable to attend.
- February 9, 2006 in Independence; Tribal Administrator Norman Wilder and Environmental Director Richard Stewart for the Fort Independence Indian Reservation.

During the consultation meetings participants reviewed maps of the Middle Owens River area, discussed project designs, identified qualified survey crew members to conduct the surveys, and shared Tribal knowledge and concerns about archaeological sites in the project area. The primary concern for the Tribes was the protection of Native American remains and resources within the project area.

The Native American Heritage Commission (NAHC) in Sacramento conducted a records search for the OVLMP of the Sacred Lands File in July, 2006. On-site Native American consultation was provided by the Paiute Tribal members employed as archaeological technicians on the survey crew.

#### 1.4.4.1 Goals and Objectives

The MOU goal for cultural resource management for the Middle Owens riparian corridor (includes both banks of the Owens River, from Pleasant Valley Reservoir to the Los Angeles Aqueduct) is:

1. *Implement sustainable land management practices for agriculture (grazing) and other resource uses*. The Cultural Resources Management Plan and other management plans implemented as part of the OVLMP will establish land uses that protect cultural and historical resources.

The objective that pertains to this MOU goal:

1. *Establish guidelines to protect cultural resources.* There are many historical sites and cultural resource areas that have been identified throughout the Middle Owens River.

#### 1.4.4.2 Cultural Resources Management Measures

For archeological sites, avoidance and preservation in place are the preferable forms of mitigation. When avoidance is infeasible, a data recovery plan would be prepared which adequately provides for recovering scientifically consequential information from the site. Studies and reports resulting from excavations must be deposited with the California Historical Resources Regional Information Center. Section 2.3.5 of this IS includes additional discussion of cultural resources in the project area.

### 1.4.5 Fire Management

Fire Management is Chapter 7 of the OVLMP. The purpose of a Fire Management Plan is to provide guidance and direction for wildland fire management and recommend strategies for fire suppression and prescribed fire. The fire management practices described in the plan are existing procedures followed by LADWP.

Fire is collaboratively managed in the Owens Valley among various private entities and public agencies (BLM, USFS, National Park Service (NPS), State of California, Native American reservations, LADWP, and private landowners). The BLM Fire Management Plan (2004) provides wildland fire management guidance and recommends strategies for fire suppression, wildland fire use, prescribed fire, non-fire fuels treatment, emergency stabilization and rehabilitation, and community assistance/protection.

The plan contains fire management units, which are geographic areas for which there are specific management response goals, objectives and constraints. The Owens Valley Fire Management Unit, which includes City of Los Angeles-owned lands, contains objectives and strategies for

wildland fire, prescribed fire, non-fire fuels treatment, post-fire rehabilitation and restoration, and community protection.

The closest fire suppression resources are located in Round Valley and Independence at the California Department of Forestry (CDF) Fire Stations 58 and 59, respectively. The CDF has this area as a Designated Protection Area (DPA) which means the CDF will respond to fires first in this area. Generally if a fire is reported on State Responsibility Area (SRA) lands, all wildland agencies respond appropriately. If no CDF Fire Resources are in the area, Interagency Fire (BLM and Inyo National Forest) will staff the fire until CDF arrives and assumes control. If the fire is larger than a spot fire, local government resources or fire districts are requested to respond.

All wildfires in the Owens Valley are considered a priority. The CDF and LADWP offices have an agreement in place whereby a LADWP Resource Representative is consulted on all fires on City of Los Angeles-owned lands, and the Resource Representative is a part of the Joint Unified Command for the fire. The wildland fire agencies (CDF, BLM, USFS) and LADWP have an "Assistance by Hire" agreement in place to collaborate on suppressing fires. Coordination between LADWP and agency fire prevention and control personnel will be conducted for more effective fire management.

The normal fire season in the Owens Valley is from April 1st through November 31st. A majority of the fires that occurred from 1980 through 2002 were human-caused (60 percent), while 22 percent were natural (lightning), and 18 percent were of unknown origin.

#### 1.4.5.1 Goals and Objectives

The MOU goals that pertain to fire management are:

1. *Improve biodiversity and ecosystem health (condition).* In addition to other land management activities, fire management prescriptions will also assist in protecting existing habitat and promoting ecosystem recovery after fires.
2. *Protect and enhance habitat for threatened and endangered species.* Fire management prescriptions will enhance existing habitat for T&E species.

The objectives that pertain to fire management include:

1. *Establish a fire response plan.* Vegetation vigor and diversity is dependent upon periodic disturbances such as fire. As such, fire is an integral part of an ecosystem. A fire management plan provides management direction for responding to fires and promoting ecosystem recovery in the OVLMP area.
2. *Initiate habitat conservation strategies to enhance and protect threatened and endangered species habitat.* The Habitat Conservation Plan, which will be implemented as part of this OVLMP process, will take into consideration fire management activities as a means of enhancing and protecting T&E species.

#### 1.4.5.2 Fire Management Measures

Fire management takes into account a range of possible decisions and actions available to prevent, maintain, control or use fire in a given landscape. Prescribed or controlled burning is used to achieve ecosystem benefits such as recycling nutrients tied up in old plant growth, controlling woody plants and herbaceous weeds, improving poor quality forage, increasing plant growth, reducing the risk of large wildfires, and improving certain wildlife habitat. In order for fires to be allowed to burn for resource benefits on City of Los Angeles-owned lands, fire managers must provide the assurance that they have the capability to suppress those fires at any time they burn outside prescribed parameters.

Controlled Burns - Limited controlled burning has been conducted to date to achieve habitat management goals and other resource benefits. LADWP or the lessees will propose areas for controlled burns. The following will be done to process each request for controlled burns:

- LADWP resource staff will evaluate the merits of a proposal to conduct a controlled burn and either authorize or not authorize the burn.

- If the burn is authorized, a burn plan will be developed to direct all resources on the burn. A burn plan will include goals, resource objectives, resource concerns, rehabilitation needs, and maps.

- An Incident Action Plan will also be developed and will include: objectives, fire prescriptions, a safety plan, medical plan, communications plan, division plan, Incident Command System (ICS) plan, fire plan, escaped fire analysis, travel plan, and maps.

- A smoke management plan will also be developed and adopted by the Great Basin Unified Air Pollution Control District (GBUAPCD).

- If the burn is proposed by the lessee, the lessee will work cooperatively with LADWP and any of its federal and state cooperators to conduct the burn.

- If the burn is proposed by LADWP, the Department will conduct the burn with or without federal and state cooperators.

Uncontrolled Burns - No burning will be allowed on LADWP lands without written approval from LADWP. Lessees will not burn any part of their allotments without LADWP approval. All managed burning for the purposes of improving rangeland, wildlife habitat, and/or watershed conditions will be conducted under the direction of LADWP. LADWP will determine the grazing rest needed to allow rehabilitation of fire impacts, should they exist. No managed burning will be allowed in riparian habitats without proper study and evaluation. Unintentional fires in riparian woodland areas will be given high priority for fire suppression.

### 1.4.6 Monitoring and Adaptive Management

The monitoring plan and adaptive management approach for the project are described in Section 9 of the OVLMP.

Adaptive management is the systematic acquisition and application of reliable information to improve management over time. Results of monitoring conducted as part of the OVLMP will be used to assess and evaluate the effects of existing land and water-use practices on the condition of grasslands, desert scrub-lands, and riparian corridors as well as the river itself. Under the adaptive management approach, flow management and land management improvements could then be implemented to reach the desired goals of a healthy and functioning ecosystem. The process is one of continually improving management practices by learning from the outcomes of previously applied management practices.

#### 1.4.6.1 Monitoring

Baseline Monitoring - Baseline data (vegetation mapping, soil descriptions, landform mapping, and habitat evaluations) collected throughout the OVLMP management area from 2002 – 2006 were compiled, mapped, and/or tabulated and warehoused for future reference. Baseline information will be compared with the results of future monitoring to assess conditions and inform adaptive management decisions.

Ongoing Monitoring – LADWP and the MOU Consultant will be responsible for conducting monitoring, analyzing the data and making recommendations. It is financially and physically impossible to monitor the entire management area; therefore, monitoring will focus on priority areas identified in the MOU, namely riparian, irrigated pastures, and sensitive plant and animal habitats. Monitoring to be conducted as part of the OVLMP is described in detail in Chapter 9 of the plan. The following is a brief summary:

- Flow monitoring – measurements for the three gaging stations on the Middle Owens River to be reviewed; focus on reducing the deleterious effects of large flow ramping events
- Vegetation - vegetation mapping from remote imagery and reconnaissance surveys at the landscape and site scales to observe major habitat changes and early detection of problem areas; vegetation sampling and habitat characterization; qualitative measures: vigor and condition class, new recruitment (woody vegetation), sprouting recruitment (trees), vegetation use (woody vegetation), and erosion class; quantitative measures: foliage density, tree canopy cover (live crown density), other tree condition indicators, emergent vegetation measurements, riparian tree inventory
- Wildlife - Indicator species adopted from the LORP, no enumeration of populations of indicator species; landscape level habitat analysis used to infer the suitability of the habitat for indicator species (new recruitment, vegetation use, and erosion used to characterize habitat)
- Grazing – pasture condition, utilization and range trend
- Recreation – photo point monitoring

OVLMP monitoring will span 15 years (**Table 4**). The primary monitoring years will be 3, 6, 8, 10, 12 and 14 in which more intensive, site-scale monitoring will be performed. Secondary monitoring years at the landscape-scale are years 2, 5, 7, 9, 11, and 15. Habitat trends will be monitored 8 of the first 10 years.

**Table 4**
**OVLMP Monitoring Schedule**

| Monitoring Component | Sampling Year | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| **Flow Monitoring** | | | | | | | | | | | | | | | |
| Ramping Rates | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| **Landscape Scale Sampling** | | | | | | | | | | | | | | | |
| Vegetation Sampling | | X | | | X | | X | | X | | X | | | | X |
| Habitat Characterization | | X | | | X | | X | | X | | X | | | | X |
| **Site Scale Sampling** | | | | | | | | | | | | | | | |
| Vegetation Sampling | | | X | | | X | | X | | X | | X | | X | |
| Habitat Characterization | | | X | | | X | | X | | X | | X | | X | |
| **Grazing Sampling** | | | | | | | | | | | | | | | |
| Pasture Condition | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Utilization | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Range Trend | | | X | | | X | | | | X | | | | | X |
| Recreation Projects | X | X | | | | | X | | | | | X | | | |

### 1.4.6.2 Adaptive Management Actions

Over time, as monitoring results are evaluated, adaptive management actions may be implemented to meet MOU goals for the OVLMP. Potential measures are summarized in **Table 5**. New tools and approaches may also be adopted as scientific advances occur.

### 1.4.6.3 Reporting

The MOU requires that Inyo County and LADWP provide annual reports describing the environmental conditions in the Owens Valley, along with studies, projects and activities conducted under the Inyo-Los Angeles Agreement and the MOU. LADWP will direct the preparation of the annual report that summarizes the data collected, present the results of analyses, and provide recommendations regarding the need to modify project actions. Any reports, studies, evaluations and analyses prepared for the OVLMP, along with supporting data, will be made available to the public and the MOU parties.

**Table 5**
**OVLMP Adaptive Management Measures**

| Measure | Description | Purpose | Monitoring Trigger |
|---|---|---|---|
| Modification of ramping rates | Adjust the ramping rates | Reduce bank sloughing and changes in channel configuration | Evidence of sloughing in river banks. |
| Modification of schedules for maintenance and mechanical intervention activities | Adjust timing of when maintenance activities or mechanical intervention activities | Minimize interference with bird nesting or migration, plant seeding, etc. | Maintenance and/or mechanical intervention activities are interfering with bird nesting, or migration, plant seeding, etc. Interference will be avoided by scheduling maintenance during non- critical periods. |
| Conducting exotic plant control activities | Increase any ongoing activities to control saltcedar and/or other exotic plant species | Limit invasion of exotic plant species | Growth of exotic plant species is hindering achievement of habitat management objectives. A determination that exotic plant control activities is hindering the achievement of habitat management objectives will be based upon monitoring data that show exotic plants are growing in concentrations that prevents or inhibits the growth of native species. |
| Modification of fencing, or addition of new fencing, for riparian and upland pastures | Add additional fencing and/or move existing fencing | Better manage livestock grazing | Livestock grazing is hindering achievement of habitat management objectives. A determination that livestock grazing is hindering the achievement of habitat management objectives will be based upon monitoring data that show recruitment or growth or riverine-riparian vegetation in riparian pastures is prevented or inhibited to the extent that more stringent management is needed. |
| Modification of utilization rates and timing within riparian and upland pastures | Alter utilization rates employed to manage livestock grazing and/or alter timing of livestock grazing | Better achieve habitat management objectives by improvement riparian vegetation recruitment and growth | Livestock grazing is hindering achievement of habitat management objectives. A determination that livestock grazing is hindering the achievement of habitat management objectives will be based upon monitoring data that show recruitment or growth or riverine-riparian vegetation in riparian pastures is prevented or inhibited to the extent that more stringent management is needed. |

| Measure | Description | Purpose | Monitoring Trigger |
|---|---|---|---|
| Installation of grazing exclosures | Add new grazing exclosures | Better protect areas of sensitive, threatened or endangered species, and/or promote site specific recovery | Livestock grazing may adversely affect sensitive, threatened or endangered plants. A determination that livestock grazing could adversely affect sensitive, threatened or endangered plants will be based upon monitoring data that show a potential for loss of T&E plant species. |
| Modification of livestock management following wildfire | Temporarily eliminate livestock grazing, reduce utilization rates and/or change timing of grazing. | Promote recovery of habitat following a wildfire. | Wildfire affects a portion of the project area. |
| Modification of recreational and human use management | Increase efforts to regulate recreational activities and other human use of the project area | Regulate human activities within the project area as necessary to achieve project management objectives | A determination that human activity is hindering the achievement of project management objectives will be based upon monitoring data that show trampling of recruiting vegetation on streambanks or cutting of new roads or trails from OHV use. |

### 1.4.7 Construction Activities to Implement the OVLMP

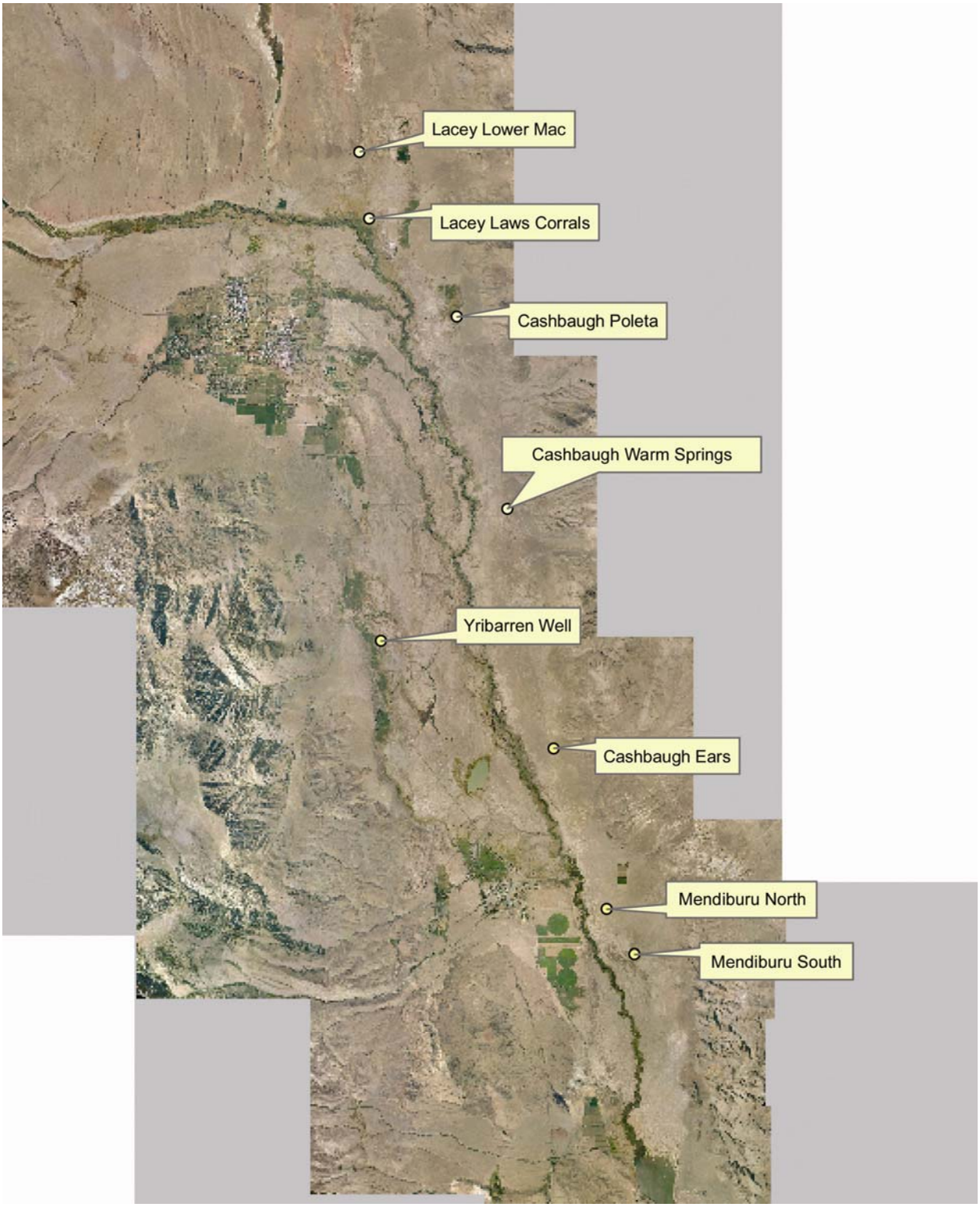
Construction/maintenance activities necessary for implementation of the OVLMP will include fence installation, repair, and installation of walkthroughs; stockwater well and water trough installation; irrigation system management; signage and information kiosk installation; and vegetation management (invasives control, maintenance of waterways). Typical equipment types for these activities are:

- Light Duty Trucks
- Quad-all Terrain Vehicles
- Cherry Picker on Large Truck
- Chainsaws
- Polesaws
- Man Lift
- Transport Vehicles
- Backhoe
- Dump Trailer pulled by Light Truck
- Dandy Digger
- Power Auger
- Herbicide Sprayers/ Injectors
- Water Truck
- Dump Truck
- ASV (Tracked Bobcat used for mowing and T-Post pounding)
- Air Compressor
- Generator
- Drill Rig

In the near term, construction activities under the OVLMP will be fence installation to protect riparian resources and seeps and springs, and installation of stock water wells to provide livestock with appropriately placed water sources. Locations are as noted in **Table 2** and figures specifically locating the new fences are included in Chapter 3 of the LMP. To install fences, vegetation may be mowed (approximately 6 ft swath) in the immediate line of the fence. Fencing would then be installed on the side of the mowed area, leaving the mowed area available for vehicle staging and worker access. In general, 54-inch-high five-strand barbed wire fences with metal T-posts every 10 feet are typical. Installation of walk throughs and elk crossing areas will be on a site-specific basis. Handicap access points will be applied where feasible.

New stockwater wells are proposed, from north to south, at: Lacey Lower Mac, Lacey Law Corrals, Cashbaugh Poleta, Cashbaugh Warm Springs, Yribarren, Cashbaugh Ears, Mendiburu North, and Mendiburu South (**Figure 15**). The facilities will be small, enclosed troughs with a lever apparatus that is pushed by the cow's nose. The nose-powered lever apparatus operates a piston pump. Well installation comprises bore hole drilling (via drill rig), installation of casings and screens, gravel pack and grout installation, and the placement of well head components. At each location, an approximately 100 ft by 50 ft area (maximum) would be disturbed for well construction.

**Figure 15**
**Stockwater Wells Location Map**



## 1.5 APPLICABLE PLANS AND POLICIES

The project is located on LADWP-owned land within Inyo County. The current overall planning document for these areas is the Inyo County General Plan. Much of the area to be managed under the OVLMP is designated as Natural Resources planning area with a zoning overlay of Open Space, 40-acre minimum lot size.

Water resources within Inyo County are managed in compliance with the 1991 Inyo/LA Long-Term Water Agreement (LTWA). The management actions to be implemented under the OVLMP will be consistent with applicable provisions of the LTWA.

## 1.6 PROJECT APPROVALS

The proposed project has been defined in cooperation with the MOU parties and the relevant lessees. The project is also consistent with LADWP policies regarding land management, grazing, recreation, and fire control.

Alterations to waters of the state are subject to CDFG Code Section 1602 (streambed alteration agreements) and placement of fill materials into waters of the U.S. is subject to permitting by the U.S. Army Corps of Engineers under Clean Water Act (CWA) Section 404 and the Regional Water Quality Control Board under CWA Section 401. Installation of the fences under the proposed project may be deemed consistent with existing LADWP agreements with CDFG (CDFG, 2008). Installation of stockwater wells will be done under permit from Inyo County.

# Section 2
# Environmental Analysis

## 2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Geology and Soils | ☐ Noise |
| ☐ Agricultural Resources | ☐ Hazards and Hazardous Materials | ☐ Population and Housing |
| ☐ Air Quality | ☐ Hydrology and Water Quality | ☐ Public Services |
| ☐ Biological Resources | ☐ Land Use and Planning | ☐ Recreation |
| ☐ Cultural Resources | ☐ Mineral Resources | ☐ Transportation and Traffic |
| | | ☐ Utilities and Service Systems |

## 2.2 AGENCY DETERMINATION

On the basis of this initial evaluation:

☐ I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature: Irene Paul Title: Project Manager

Printed Name: Irene Paul Date: March 10, 2010

## 2.3 ENVIRONMENTAL CHECKLIST

### 2.3.1 Aesthetics

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a) and c) **Less Than Significant Impact.** The OVLMP will be implemented on Los Angeles-owned, non-urban lands in the Owens River Watershed in Inyo County, California. This vast area (approximately 250,000 acres within the OVMA, including the LORP area) has innumerable scenic vistas including views of the valley, mountains, rock outcroppings, and water features.

Implementation of the OVLMP will result in installation of new fences, wells, signage, information kiosks, and barriers to control parking near waterways. New fences are proposed on existing ranches and include portions of the Owens River. Typically, the fences will be 54-inch high five-strand barbed wire with metal T-posts every 10 feet. Construction may include vegetation mowing of linear areas to facilitate installation and use of vehicles and construction equipment. Once installed on the ranches, the new fences will be of similar appearance to existing structures. Adjacent to the river, the fence style (narrow barbed wire) will limit their visibility from a distance, and since the purpose of their installation along the river is to protect riparian vegetation from excessive use, the overall impact on aesthetics is beneficial. Stockwater wells are proposed at eight locations throughout the valley. Construction disturbance for each facility will be limited to an approximately 50 ft by 100 ft area. Once installed, the stockwater wells will be in keeping with other agricultural facilities on the leases. The OVLMP also includes invasive plant control including removal of exotic species. Removal of vegetation for this purpose can alter the visual character of a specific area but once accomplished allows revegetation of the site with native species, an overall beneficial impact on aesthetics.

Within the context of the vast project area, minor alterations for installation of small structures and removal of exotic species will have a less than significant impact on the visual character of the valley. Protection of riparian resources, pasture management to improve

field vegetation, recreation management to limit vehicle travel near waterways, and exotic plant control will benefit aesthetics of the area.

b) **Less Than Significant Impact.** Scenic roadways are designated by BLM, Inyo National Forest, California Department of Transportation (Caltrans), and the Federal Highway Administration. A 20-mile stretch of State Highway 395 is a designated scenic roadway - from Fort Independence to Fish Springs Road just north of Tinemaha Reservoir (Caltrans, 2008). Highway 395 in Inyo County is also designated as a National Scenic Byway by the National Scenic Byways Program of the U.S. Department of Transportation, Federal Highway Administration (FHA, 2010). Many of the leases are bisected by, or adjacent to, Highway 395. However, based on the limited extent of construction disturbance necessary for implementation of the OVLMP and the overall beneficial effects on vegetation and aesthetics from project implementation, impacts on scenic roadways will be less than significant.

d) **No Impact.** Implementation of the OVLMP will result in installation of new fences, stockwater wells, signage, information kiosks, and barriers to control parking near waterways. Construction activity would occur during daylight hours. New sources of lighting or reflective material are not proposed. There will be no impacts on light or glare that could affect day or nighttime views of the area.

## 2.3.2 Agricultural and Forest Resources

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☒ | ☐ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☒ | ☐ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a) **No Impact.** The Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency is administered by the California Department of Conservation (CDOC). The FMMP does not include Inyo County, therefore the proposed project would have no impact on conversion of FMMP designated Farmland.

b) **No Impact.** Existing zoning by Inyo County for much of the Los Angeles-owned non-urban land is OS-40 (Open Space, 40 acre minimum lot size) with a land use designation of A (Agricultural) and NR (Natural Resources). Inyo County does not offer a Williamson Act program, therefore none of the OVLMP lands are entered into Williamson Act contracts. Therefore the proposed project would have no impact on agricultural zoning or Williamson Act contracts.

c) and d) **Less Than Significant Impact**. The project area is not zoned as forested land nor will the proposed project result in the conversion of forest land to non-forest use. Public Resources Code Section 12220 (g) defines "Forest Land" as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Portions of the Los Angeles-owned non-urban lands in Inyo County to be managed under the OVLMP are

riparian forest with aesthetic, wildlife, biodiversity, water quality, recreation, and other public benefits. Removal of native trees is not proposed and the project actions will protect and improve riparian conditions by managing grazing and recreation activities that are currently impacting these resources. Implementation of the project will have less than significant temporary impacts related to fence and other minor facilities installation. The overall impact is beneficial on riparian forest lands.

e) **Less Than Significant Impact.** The OVLMP will have no impact on conversion of designated Farmland to non-agricultural use, since none is present in Inyo County. Implementation of the OVLMP will have an impact on local agriculture by implementation of the Grazing Management Plans for each of the City-owned ranches. Operations on the leases will be restricted by:

- Grazing timing restrictions – For some leases, the Grazing Management Plans specify the specific period allowable for grazing and/or the timing of livestock movement from one pasture to another.
- Enforcement of forage utilization rate standards – The Grazing Management Plans require livestock removal from areas when specific upland and riparian forage utilization standards are reached.
- Establishment of exclosures to restrict grazing – The Grazing Management Plans include fence installation to protect riparian areas of the Owens River, springs and seeps, and other wildlife areas on some leases (e.g., Waterfowl Management Area on Thibaut Ranch).
- Herd size reductions – In a few cases (e.g., S-T Ranch Livestock Grazing Lease), herd size reductions are mandated by the Grazing Management Plans. In other cases, herd size alterations may result from grazing timing restrictions, limits on forage utilization rates, and/or reductions in available grazing area due to vegetation exclosures.

Development of the Grazing Management Plans was done in coordination with the lessees; typically at least three meetings were held with LADWP staff and the lessee or ranch manager. Applying Best Management Practices (BMPs) on the leases is intended to maintain already healthy rangelands and improve those that have been degraded. While the Grazing Management Plans include construction of fencing and restrictions on livestock movement, they do not represent irrevocable conversion of land use. Since these restrictions do not eliminate agricultural operations on the vast majority of the leased areas and are management actions necessary to meet the multi-purpose uses of the parcels (agriculture, wildlife habitat, and recreation), the impact on agriculture will be less than significant.

### 2.3.3 Air Quality

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☒ | ☐ |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ☒ | ☐ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

The southern Owens Valley is located in the Great Basin Unified Air Pollution Control District (GBUAPCD). The valley has been designated by the State and EPA as a non-attainment area for the state and federal 24-hour average PM10 standards. Wind-blown dust from the dry bed of Owens Lake is the primary cause of the PM10 violations. The area has been designated as unclassified for the 1-hour ozone standard and unclassified or in attainment for all other ambient air quality standards (CARB, 2009). Large industrial sources are absent from Owens Valley. The major sources of criteria pollutants, other than wind-blown dust, are woodstoves, fireplaces, vehicle tailpipe emissions, fugitive dust from travel on unpaved roads, prescribed burning, and gravel mining.

a) **Less Than Significant Impact.** The relevant air quality plan for the project area is the Final 2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan (SIP) (GBUAPCD, 2008). The focus of this planning document is implementation of dust control measures at Owens Dry Lake, the major particulate matter source in the valley. Several of the leases covered by the OVLMP are located on or adjacent to Owens Lake. However, since implementation of the Grazing Management Plans may decrease particulate matter emissions through improved rangeland management and increased vegetated cover, the OVLMP is consistent with the applicable air quality plan. The impact is therefore less than significant.

b) **Less Than Significant Impact.** The GBUAPCD has not established specific quantitative thresholds of significance for air emissions from construction. However, emissions thresholds for permitting new stationary sources (GBUAPCD Rule 209-A) can be used as screening criteria to evaluate the potential significance of project emissions during construction. [Since the carbon monoxide threshold in Rule 209-A is not a numeric standard, the South Coast Air Quality Management District threshold was used for this analysis.]

Emissions during project construction would result from the operation of the equipment listed in Section 1, including: drill rig, ditch witch, air compressor, generator, light duty trucks, all terrain vehicles, backhoes, and transport trucks. Based on the assumption that maximum daily emissions will be created during concurrent fence and stockwater well installation, **Table 6** summarizes worst-case peak day emissions estimates. Since emissions are estimated to be substantially below significance thresholds, the impact on air quality from project construction is less than significant.

Operation of the Los Angeles-owned, non-urban lands in Inyo County under the OVLMP will maintain existing good rangeland conditions on some of the leases while improving conditions at leases that have been damaged by overgrazing. Recreation management under the OVLMP will reduce the number of informally created roadways that lead to the river, potentially including ripping and reseeding of these areas. These management actions will reduce dust emissions, a beneficial impact. Prescribed burning is a management tool to be implemented under the OVLMP. However, since this is an on-going practice of LADWP for land management (done in compliance with GBAPCD requirements), air pollutant emissions associated with fire would not increase under the proposed project.

c) **Less Than Significant Impact.** The project area is a non-attainment area for PM10. Construction activities will result in dust emissions from earth disturbance (fence installation, stockwater well installation, traffic barrier installation). LADWP must meet GBUAPCD Rule 401, which requires that fugitive dust emission control measures be implemented to adequately prevent visible dust from the leaving the property and to maintain compliance with the PM10 standard. With use of a water truck as needed during ripping and reseeding of blocked roadways, or other maintenance activities involving larger areas, dust emissions related to project construction and operation would not be anticipated to be visible off the project site. As noted above, vegetation enhancements expected under the project would reduce fugitive dust emissions, a beneficial impact. Project-related impacts on PM10 will therefore be less than significant.

d) **Less Than Significant Impact.** Sensitive receptors include schools, day-care facilities, hospitals, nursing homes, and residences. Sensitive receptors are located in the vicinity of the ranches and the areas with proposed recreation management actions. During construction, the mechanical equipment noted in Section 1 will be used for installation of fences, stockwater wells, and traffic barriers, as well as exotic plant and revegetation measures. Due to the limited air pollutant emissions from the small number of equipment and the short period of equipment use the impact on sensitive receptors will be less than significant.

e) **Less Than Significant Impact.** Project construction activities will result in minor localized odors associated with fuel use for equipment and vehicles. These odors are common, not normally considered offensive, and would be experienced by few residences, since only a small number of residences are located on the leases. Odor impacts to potential recreation visitors at the sites during construction activities will be temporary and therefore less than significant.

## Table 6
## Summary of Estimated Worst-Case Peak Day Construction Emissions

| Emissions Source (on-road vehicles and ATVs) | Vehicle Type | No. | Est Max miles per day | Emission Factor (lbs/mi) [1] | | | | | | Estimated Peak Day Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CO | VOC | NOx | SOx | PM10 | PM2.5 | CO | VOC | NOx | SOx | PM10 | PM2.5 |
| Light Duty Truck | PV | 8 | 20 | 0.008263 | 0.000914 | 0.000918 | 0.000011 | 0.000087 | 0.000055 | 1.322 | 0.146 | 0.147 | 0.002 | 0.014 | 0.009 |
| ATV | PV | 4 | 20 | 0.008263 | 0.000914 | 0.000918 | 0.000011 | 0.000087 | 0.000055 | 0.661 | 0.073 | 0.073 | 0.001 | 0.007 | 0.004 |
| Transport Vehicles | HHDT | 3 | 40 | 0.011955 | 0.003042 | 0.038221 | 0.000041 | 0.001831 | 0.001601 | 1.435 | 0.365 | 4.587 | 0.005 | 0.220 | 0.192 |
| | | | | | | | | | | | | | | | |
| **Emissions Source (construction equipment)** | **No.** | **Est Max hrs of use per day** | **Emissions Factor (lbs/hr) [2]** | | | | | | | **Estimated Peak Day Emissions (lbs/day)** | | | | | |
| | | | CO | VOC | NOx | SOx | PM10 | PM2.5 [3] | | CO | VOC | NOx | SOx | PM10 | PM 2.5 |
| Backhoe/Bobcat | 2 | 4 | 0.393 | 0.1021 | 0.6747 | 0.0008 | 0.0521 | 0.0464 | | 3.144 | 0.817 | 5.398 | 0.006 | 0.417 | 0.371 |
| Air Compressor | 2 | 8 | 0.3613 | 0.112 | 0.732 | 0.0007 | 0.0526 | 0.0468 | | 5.781 | 1.792 | 11.712 | 0.011 | 0.842 | 0.749 |
| Generator | 2 | 8 | 0.3293 | 0.0961 | 0.644 | 0.0007 | 0.0396 | 0.0352 | | 5.269 | 1.538 | 10.304 | 0.011 | 0.634 | 0.564 |
| Drill Rig | 1 | 12 | 0.5146 | 0.1052 | 1.1331 | 0.0017 | 0.0498 | 0.0443 | | 6.175 | 1.263 | 13.598 | 0.021 | 0.598 | 0.532 |
| **Total** | | | | | | | | | | **23.8** | **6.0** | **45.8** | **0.1** | **2.7** | **2.4** |
| **Significance Thresholds [4]** | | | | | | | | | | **550 [5]** | **250** | **250** | **250** | **80** | **55 [3]** |

Notes: PV: passenger vehicles, HHDT: heavy-heavy-duty trucks

Sources:

1 SCAQMD. 2007a. EMFAC2007 version 2.3 Emission Factors for On-Road Passenger Vehicles & Delivery Trucks. Scenario Year 2010.

2 SCAQMD 2007b. SCAB Fleet Average Emission Factors (Diesel). Scenario year 2010.

3 SCAQMD. 2006. Final –Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance.

4 GBUAPCD. 1993. Rule 209-A Standards for Authorities to Construct.

5 SCAQMD. 1993. CEQA Air Quality Handbook.

## 2.3.4 Biological Resources

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☒ | ☐ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? | ☐ | ☐ | ☒ | ☐ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☒ | ☐ |

**Discussion:** The project area for the OVLMP is Los Angeles-owned, non-urban lands in Inyo County (excluding the LORP area). This vast area (approximately 250,000 acres within the OVMA (including the LORP area)) includes the rangelands located on the LADWP leases, the riverine-riparian lands of the Middle Owens River, and adjacent open space parcels. For the Middle Owens River, a riparian vegetation inventory was conducted in 2004 using 2000 imagery (WHA, 2004); a Habitat Assessment was conducted in 2006 (Oxbow Environmental, 2006), and a Baseline Data; Site Scale Vegetation, Habitat and Channel Morphology report was prepared in 2006 (ESI, 2006). Mapping of the 14,735 acres of the Middle Owens River riparian areas notes the major vegetation types of water, marsh, wet alkali meadow, alkali meadow, riparian scrub (willow), riparian forest (willow), rabbitbrush-Nevada saltbush scrub/meadow, rabbitbrush-Nevada saltbush scrub, and abandoned agriculture (WHA, 2004). Habitat conditions assessed for the river in 2005-06 were incorporated into the California Wildlife Habitat Relationship software system to define habitat suitability for wildlife indicator species and guilds (Oxbow Environmental, 2006).

a) **Less Than Significant Impact With Mitigation Incorporated.** A wide range of sensitive plant and animal species are known for or have the potential to occur in the OVLMP project area.

**Plants**

Although not a complete listing, some of the sensitive plant species with the potential to occur in the OVLMP area are:

- Owens Valley checkerbloom (*Sidalcea covillei*) (state endangered, SE) (California Native Plant Society (CNPS 1B.1))
- Inyo County star-tulip (*Calochortus excavatus*) (California species of special concern (CSSC)) (CNPS 1B.1)
- Inyo phacelia (*Phacelia inyoensis*) (CNPS 1B.2)
- Parish's popcorn-flower (*Plagiobothrys parishii*) (CNPS 1B.1)
- scalloped moonwort (*Botrychium crenulatum*) (CNPS 2)
- intermontane lupine (*Lupinus pusillus*) (CNPS 2)
- Nevada oryctes (*Oryctes nevadensis*) (CNPS 2.1)
- Robbins' pondweed (*Potamogeton robbinsii*) (CNPS 2)
- Shockley's milk-vetch (*Astragalus serenoi var. shockleyi*) (CNPS 2)
- pinyon rock-cress *(Arabis dispar)* (CNPS 2.3)
- foxtail thelypodium *(Thelypodium integrifolium ssp. Complanatum)* (CNPS 2.2)
- Sagebrush loeflingia *(Loeflingia squarrosa var. artemisiarum)* (CNPS 2.2)
- Inyo blazing star *(Mentzelia inyoensis)* (CNPS 1B.3)
- Ripley's alicellia *(Aliciella ripleyi)* (CNPS 2.3)
- Coyote gilia *(Aliciella triodon)* (CNPS 2.2)
- Parry's monkeyflower *(Mimulus parryi)* (CNPS 2.3)
- falcate saltbush *(Atriplex gardneri var. falcate)* (CNPS 2.2)
- Horn's milk-vetch *(Astragalus hornii* var. *hornii)* (CNPS 1B.1)
- Booth's hairy evening-primrose *(Camissonia boothii ssp. Intermedia)* (CNPS 2.3)
- Torrey's blazing star *(Mentzelia torreyi)* (CNPS 2.2)
- Geyer's milk-vetch *(Astragalus geyeri var. geyeri)* CNPS 2.2)
- July gold *(Dedeckera eurekensis)* State Rare (SR), CNPS 1B.3)
- hot springs fimbristylis *(Fimbristylis thermalis)* (CNPS 2.2)
- Hillman's silverscale *(Atriplex argentea var. hillmanii)* (CNPS 2.2)
- King's eyelash grass *(Blepharidachne kingie)* (CNPS 2.3)

[California Native Plant Society listing (1A Plants presumed extinct in California; 1B Plants rare, threatened, or endangered in California and elsewhere; 2 Plants rare, threatened, or endangered in California, but more common elsewhere; 3 Plants about which we need more information - a review list; 4 Plants of limited distribution - a watch list)]

**Impacts to Sensitive Plant Species**. Rare plants are known for the OVLMP project area. For example, populations of Owens Valley checkerbloom occur on dry and moist alkali meadows of the Round Valley Ranch, Coloseum, Georges Creek, Big Pine Canal, Archie Adjunct, Cashbaugh, and Blackrock Livestock Grazing leases. Inyo County star-tulip occurs on many of the leases. Disturbance of sensitive plant species, if any are present in the specific locations to be disturbed for project implementation, would be a significant impact. However, installation of fencing, stockwater wells, roadway barriers, and ground disturbing activities related to exotics removal will be done under the supervision of LADWP biologists. Areas of Owens Valley checkerbloom, Inyo County star-tulip, or other sensitive plant species will be flagged and access restricted during earth disturbing activities (mowing, fence installation, stockwater well installation, herbicide use and/or plant removal) to prevent impacts to rare plant species. Work within areas known for sensitive plants will be done by hand, including pounding fence posts by hand. With the proposed installation methods which will limit vehicles and larger construction equipment in areas containing rare plant populations, impacts on sensitive plants will be less than significant with mitigation incorporated.

**Birds**

Sensitive bird species potentially present in the OVLMP area are listed in **Table 7**. Noise and general disturbance during installation of project fences and stockwater wells, as well as exotic plant management, has the potential to disrupt nesting of area birds, including sensitive bird species. Fence construction in some areas will overlap with nesting season (May through July for most species). Surveys will be conducted by LADWP biologists for nesting activities by sensitive species prior to fence and stockwater well construction and other potentially disturbing activities. If active nests area present, work will be suspended in the area.

**Table 7**
**Sensitive Bird Species of the OVLMP Area**

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Cooper's hawks** | *Accipiter cooperii* | CSSC | Occur throughout California in wooded and forested areas, and the species is a year-round resident in the Owens Valley. It forages on small birds and mammals and will take other prey opportunistically, most often in areas with patchy trees and openings, rarely in very open areas. Cooper's hawks build nests in areas with dense stands of trees (LADWP, 2006). This species may forage over or near the project leases. |
| **Ferruginous hawks** | *Buteo regalis* | CSSC | Search for prey from low flights over open, treeless areas, and glide to intercept prey on the ground, and also hover and hunt from high mound perches . They feed mostly on lagomorphs (rabbits and hares), ground squirrels, and mice, but also take birds, reptiles, and amphibians. This species is not known to breed in California (CDFG, 1983). It is considered a fall migrant and winter visitor in the Owens Valley (LADWP, 2004). This species may forage over or near the project leases. |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Sharp-shinned hawks** | *Accipiter striatus* | CSSC | Found in dense to semi-open coniferous, deciduous or mixed forests, and occasionally along riparian edges (LADWP, 2006). This species occurs in the Owens Valley as a common winter visitor (LADWP, 2006; LADWP, 2004). This species may forage over or near the project leases. |
| **Swainson's hawks** | *Buteo swainsoni* | ST | Generally nest in scattered trees or along riparian systems adjacent to pastures or croplands. Migration to the wintering grounds generally occurs around September, and egg-laying generally occurs in April with young present during May to June. In the Owens Valley, nesting occurs in trees around pastures and croplands (LADWP, 2006). This species is known for the Owens River and 4J Ranch Livestock Grazing lease. The HCP currently being prepared by LADWP will cover this species. |
| **Bald eagles** | *Haliaeetus leucocephalus* | SE, FD | Winter throughout most of California at lakes, reservoirs, river systems, and some rangelands and coastal wetlands. The breeding range is mainly in mountainous habitats near reservoirs, lakes and rivers, mainly in the northern two-thirds of California in the Central Coast Range and on Santa Catalina Island. Large nests are normally built in the upper canopy of large trees, usually conifers. The birds are opportunistic foragers, usually feeding on fish or waterfowl, but they also prey on other small animals and eat carrion (CDFG, 2000). Bald eagles do not nest in the Owens Valley, but they use the area in winter and to a lesser extent in early spring and late fall. During the winter, the eagles hunt and scavenge for fish, waterfowl and other prey, especially in areas where waterfowl concentrate. This species may occur in open water areas where their primary prey (fish or waterfowl) are abundant. |
| **Golden eagles** | *Aquila chrysaetos* | CSSC | Uncommon year-round residents throughout much of California, particularly where open habitats are near cliffs, large trees, or transmission towers used for nesting. Golden eagles prefer open, sloping landscapes such as foothills and canyons, with cliffs and trees for nesting and cover. Golden eagles often forage for rabbits, rodents and carrion over grasslands and open scrub vegetation types. Golden eagles breed in Inyo County and are considered an uncommon year-round resident (ESI, 1999). This species may forage over or near the project leases. |
| **Northern harriers** | *Circus cyaneus* | CSSC | Frequent meadows, grasslands, desert sinks, and freshwater emergent wetlands, and nest in shrubby vegetation usually on the edge of, or in, marshes (GBUAPCD, 1997). Harriers predominantly feed on small mammals, mainly, Microtus (vole) species, but may also feed on reptiles, amphibians, birds and invertebrates (California Partners in Flight, 2000). Northern harriers are considered resident in the Owens Valley (LADWP, 2004). This species may forage over or near the project leases, and may also nest in riparian trees along nearby waterways. |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Merlins** | *Falco columbarius* | CSSC | Do not breed in California, but they frequent open areas and prey on small birds in the winter. Fall migrants pass along the coast and coastal estuaries, along inland valleys with scattered groves of trees, and in desert areas where open agricultural land is broken up with groves of trees. Merlins primarily eat small birds and some mammals and insects caught on the ground or in the air. It is a non-breeding, rare winter-spring and uncommon fall migrant in the Owens Valley (ESI, 1999). This species is not likely to, but may occur on or near project leases. |
| **American peregrine falcons** | *Falco columbarius* | FD, SE | Nest typically on ledges of large cliff faces, but some pairs nest on buildings and bridges. Nesting and wintering habitats are varied, including wetlands, woodlands, other forested habitats, cities, agricultural areas and coastal habitats. Peregrine falcons feed on birds that are caught in flight (CDFG, 2003). American peregrine falcons migrate through the Owens Valley in spring and fall in association with the waterfowl and shorebirds that migrate through the area. |
| **Prairie falcons** | *Falco mexicanus* | CSSC | Feed mostly on small mammals, some small birds, and reptiles, and catch prey in air and on ground in open areas. They nest on sheltered ledges of cliffs, bluffs or rock outcrops (CDFG, 1983). They are a year-round resident in the Owens Valley (LADWP, 2004). This species may forage over or near the project leases. |
| **Burrowing owls** | *Athene cunicularia* | CSSC | Nest and take cover in abandoned mammal burrows in habitat that includes open, well-drained grasslands, steppes, deserts, prairies and agricultural lands. They hunt from low perches, and eat mostly insects and occasionally small mammals, reptiles, and birds (GBUAPCD, 1997). This species is not known to, but may nest in ground squirrel burrows that may be present on the project pastures/croplands. |
| **Long-eared owls** | *Asio otus* | CSSC | Roost during the day in dense trees and brush and at night fly over forest edges and brushy fields in search of prey, including small mammals. The long-eared owl is usually solitary but small numbers may roost together in winter (LADWP, 2006). This species may forage over or near the project leases. |
| **Short-eared owls** | *Asio flammeus* | CSSC | Found in open habitats, such as marshes, wet meadows, grasslands, tundra, and cultivated fields. They are migratory and are most frequently observed in California during winter months. Short-eared owls need tall grass or brush for resting and roosting cover, and nest on the ground in grasslands below 2,000 feet elevation. In Inyo County, this species is a casual migrant and winter visitor; breeding may occur but has not been confirmed (ESI, 1999). This species may forage over or near the project leases. |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| | | | |
| **Ospreys** | *Pandion haliaetus* | CSSC | Feed primarily on fish but may also take other wildlife including birds and invertebrates (GBUAPCD, 1997). They nest on a platform of sticks at the top of large snags, dead-topped trees, on cliffs, or on human made structures (CDFG, 1983). Ospreys are considered a summer visitor in the Owens Valley (LADWP, 2004). This species may forage in open water areas where their primary prey (fish) are abundant. |
| **Vaux's swifts** | *Chaetura vauxi* | CSSC | Found in coastal coniferous forests of coast redwood and Douglas fir or in interior forests of mixed oaks and conifers. They nest in large hollow trees usually in small groups. In the Owens Valley, this species occurs as an uncommon summer migrant and breeder (LADWP, 2006; LADWP, 2004). This species may forage over or near the project leases. |
| **Bank swallows** | *Riparia riparia* | ST | Nest in colonies, excavating tunnels into vertical sandbanks. They forage over nearby meadows and water. In Inyo County, this species is considered a fairly common migrant and a rare, local summer breeder (LADWP, 2006). This species may forage over or near the project leases. |
| **Western snowy plovers** | *Charadrius alexandrinus nivosus* | FT for coastal population only, CSSC for inland breeding populations | At inland sites, primarily forage on alkali flies (Ephydra species) (LADWP, 2004). They forage in the wet sand, on salt pans, on spoil sites, and along the edges of salt marshes, salt ponds, and lagoons; they sometimes probe for prey in the sand and pick insects from low-growing plants (USFWS, 2001). Plovers avoid areas with any but sparse vegetation (LADWP, 2004). Snowy plovers are known to breed at Owens Lake. |
| **Mountain plovers** | *Charadrius montanus* | FC, CSSC | Feed primarily on insects such as beetles, grasshoppers, crickets, and ants. This species is not known to nest in California, but California is the primary wintering ground for mountain plovers. Wintering mountain plovers are found mostly on cultivated fields, but can also be found on grasslands or landscapes resembling grasslands (USFWS, 2003). Mountain plovers are a rare migrant in the Owens Valley (LADWP, 2004), but may occur on project leases because their preferred habitat includes pastures and croplands. |
| **Long-billed curlews** | *Numenius americanus* | CSSC | Use their long bills to probe deep into substrate, or to grab prey from the mud surface, while at times wading in belly-deep water. In inland habitats, they feed on insects, worms, spiders, berries, snails, and small crustaceans, and occasionally take nestling birds. In California, they nest on elevated interior grasslands and wet meadows, usually adjacent to lakes or marshes (CDFG, 1983). The species is considered a summer visitor in the Owens Valley (LADWP, 2004). This may occur in flood-irrigated areas. |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Western least bitterns** | *Ixobrychus exilis* | CSSC | Occur in emergent wetlands and emergent riparian wetlands. They nest in dense emergent vegetation such as cattails and tules. Bitterns consume a variety of small fishes, mammals, crayfish, amphibians and many different aquatic and terrestrial invertebrates. In Inyo County, the western least bittern is considered an uncommon spring-summer seasonal breeder in very localized areas (ESI, 1999). This species may occur in marshes and wetlands. |
| **California gulls** | *Larus californicus* | CSSC | Omnivorous and feed on garbage, carrion, earthworms, adult insects, and larvae. In inland areas, they frequent lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. They nest on islands in alkali or freshwater lakes and salt ponds in California (CDFG, 1983). This species nests in large numbers at Mono Lake, and is also present in larger numbers at Owens Lake. This species may occur on or near project leases. |
| **White-faced ibis** | *Plegadis chihi* | CSSC | Considered a common migrant in the Owens Valley (LADWP, 2004). This species prefers to feed in freshwater emergent wetlands, shallow lacustrine waters, and muddy ground of wet meadows and irrigated or flooded pastures and croplands. It feeds on earthworms, insects, crustaceans, amphibians, small fishes, and miscellaneous invertebrates. It probes deep in mud with its long bill, and also feeds in shallow water or on the water surface. Nesting habitat is dense, freshwater emergent wetland (CDFG, 1983). This species is not likely to occur on project leases because of lack of preferred habitat (wet meadows), but could occur in nearby flood-irrigated areas. |
| **Western Yellow-Billed Cuckoo** | *Coccyzus americanus occidentalis* | SE | Seasonal migrants to Inyo County, nesting in riparian habitat between late June/early July and August (LADWP, 2006). Yellow-billed cuckoos require habitats with structural diversity that includes dense understory vegetation and a nearly complete canopy cover in expansive woodlands (USFWS, 1998a). They nest in trees in deciduous riparian areas, usually in willows and less frequently in cottonwoods (ESI, 1999). Currently, yellow-billed cuckoos are a rare transient and rare summer resident and breeder in limited geographical areas in Owens Valley. LADWP has prepared yellow-billed cuckoo habitat enhancement plans to enhance and maintain cuckoo habitat in the Hogback Creek and Baker Creek areas (LADWP, 2006). This species may occur in riparian areas along waterways near the project leases during migration. The HCP currently being developed by LADWP will cover this species. |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Yellow warblers** | *Dendroica petechia* | CSSC | Breed in riparian woodlands along most of the coastal and desert lowlands, as well as the montane foothills of California. Yellow warblers usually nest in deciduous riparian plant species such as willows and cottonwoods, and prefer riparian habitats with a dense, multi-layered tree canopy and heavy brush understory of shrubs or sapling trees for breeding and partially open tree canopy. The yellow warbler is a fairly common migrant and breeding summer resident and confirmed breeder in Inyo County (ESI, 1999). This species may occur in riparian areas along waterways. |
| **Willow flycatchers and Southwestern Willow Flycatcher** | *Empidonax traillii*<br><br>*Empidonax traillii extimus* | ST, USFS Sensitive<br><br>FE, SE | Nest in willow thickets near rivers, streams, lakes, and montane meadows. A relatively large population of the federally-endangered southwestern willow flycatcher occurs in the northern Owens Valley near Bishop (LADWP, 2006). This species was also observed at the Cashbaugh Livestock Grazing lease in 1993 and 1999. This species may occur in riparian areas along waterways. The HCP currently being developed by LADWP will cover Southwestern Willow Flycatcher. LADWP also has a Conservation Strategy in place with USFWS to manage for this species on City lands in the Owens Valley. |
| **Brown-crested flycatcher** | *Myiarchus tyrannulus* | CSSC | Inhabits riparian woods (LADWP, 2006). This species is considered a rare to uncommon summer resident during June and July, and a local breeder in Inyo County (ESI, 1999). This flycatcher requires riparian thickets, trees, snags, and shrubs for foraging perches, cavities, and other cover. This flycatcher requires cavities excavated by woodpeckers and others for nesting. They feed on flying insects, especially beetles, and occasionally eat small fruits (ESI, 1999). This species may occur in riparian areas along waterways near the project leases during migration. |
| **Yellow-breasted chats** | *Icteria virens* | CSSC | Inhabit dense tangled brushy patches and hedgerows in open sunny areas (LADWP, 2006). They glean insects and spiders from the foliage of shrubs and trees. This species breeds in dense brush or scrub, particularly along streams and at swamp margins, typically from early May to early August. This species is considered an uncommon to fairly common summer resident and confirmed breeder in Inyo County (ESI, 1999). This species may occur in riparian areas along waterways near the project leases during migration. |
| **Loggerhead shrikes** | *Lanius ludovicianus* | CSSC | Locally rare, year-round resident in California, however, population trends in the Owens Valley are unknown. This species nests in dense foliage of shrubs and trees, and forages in open habitats for insects and small vertebrates (LADWP, 2006). This species may occur in shrublands near the project leases. |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Summer tanagers** | *Piranga rubra* | CSSC | Inhabit cottonwood-willow associations, especially older, dense stands along rivers and streams. They breed in mature, desert riparian habitat dominated by cottonwoods and willows, and prefer stands with a dense herbaceous and a shrubby understory. Summer tanagers eat insects, spiders, and small fruits. They mostly forage in the upper tree canopies but will also forage in low shrubs. In Inyo County, the summer tanager is considered a rare late-spring to early-fall resident and breeder (LADWP, 2006). This species may occur in riparian areas along waterways near the project leases during migration |
| **LeConte's thrashers** | *Toxostoma lecontei* | CSSC | Inhabit very sparse desert scrub, alkali desert scrub, and desert succulent scrub, especially with creosote bush. They nest in tall, robust salt bushes that can support a nest, commonly in shrubs along washes. They forage primarily on arthropods by digging several inches into the substrate, and will occasionally feed on seeds, small lizards, or other small vertebrates. In the Owens Valley this species is considered an uncommon year-long resident and breeder (LADWP, 2006). This species may occur in shrublands near the project leases. |
| **Least Bell's vireos** | *Vireo bellii pusillus* | FE, SE | Inhabit and nest in low riparian growth near the water or in dry river bottoms. Preferred nesting habitat is limited to areas with dense detritus and living vegetation. Although it was once a "tolerably common" summer resident in the Owens Valley, least Bell's vireo are now observed rarely (observed near Big Pine in 1976 and 1980) (USFWS, 1998a). The HCP currently being developed by LADWP will cover this species. |

Sources: CDFG, 2009 and as noted.
Species Status: FD – Federal Delisted, FE – Federal Endangered, FC – Federal Candidate, FT – Federal Threatened, SE – State Endangered, ST - State Threatened, CSSC – California Species of Special Concern

### Other Sensitive Wildlife

Other sensitive animal species potentially present in the OVLMP area are listed in **Table 8.** The sensitive bat species listed may forage over or near project leases. However, fence and well installation that would occur in the daytime would not be anticipated to significantly affect bat foraging. If a bat roost is identified during project fence or well installation, the situation will be evaluated and appropriate action taken to avoid impacts such as exclusion measures or providing an alternative roost site. Implementation of the OVLMP and improvements in riparian vegetation will improve habitat for sensitive bat species; a beneficial impact.

The proposed project does not include changes in flow volumes or water quality in the Middle Owens River or other area streams that could adversely impact sensitive fish or amphibian species. Recreation management actions will be implemented to reduce streambank erosion and stream sedimentation. Grazing management actions will improve

vegetation conditions on ranches thereby reducing erosion. These project effects will be beneficial for aquatic species.

**Table 8**
**Sensitive Mammal Species of the OVLMP Area**

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Western white-tailed jackrabbits** | *Lepus townsendii townsendii* | CSSC | In California principally occupy open forests and sagebrush-grassland associations in the Great Basin Province and also occur at high elevations along the main crest of the Sierra Nevada (CDFG, 1986). They occupy a variety of habitats, including sagebrush-covered slopes on the eastern Sierra Nevada, grasslands and meadows to timberline or above, and conifer forests (CDFG, 1986). This species is not expected to occur on or near project leases since its range is higher in elevation. |
| **Owens Valley voles** | *Microtus californicus vallicola* | CSSC | Inhabit wetlands and lush grassy ground. In the Owens Valley this species occurs on irrigated pastures and alfalfa fields and other grass-dominated sites, including along the Owens River and in alkali shrub-meadow habitats (LADWP, 2006). This species may occur on or near project leases in areas proposed for fence installation. If present on the project sites, impacts could include burrow collapse from vehicle travel outside established roadways, fence post installation, and exotic vegetation removal. However, since work will be conducted under the supervision of LADWP biologists, surface disturbances will be directed around active vole burrows if any are observed. |
| **Sierra Nevada bighorn sheep** | *Ovis canadensis sierrae* | FE, SE | Known to occur around Mount Williamson and Mount Baxter (west of Independence). They inhabit alpine meadows, grassy mountain slopes and foothill country near rocky cliffs and bluffs. They avoid forest and thick brush or areas without precipitous escape terrain (LADWP, 2006). They are not expected to occur on or near project leases since they are rarely observed on the valley floor. |
| **Pallid bats** | *Antrozous pallidus* | CSSC, USFS Sensitive | Occur in arid and semiarid, lowland habitats such as oak woodlands, grasslands, active agricultural areas, and desert scrub. Roost sites include crevices and cavities in cliffs, rocks, trees, caves, bridges, buildings, and mines. Foraging habitat includes grasslands, shrublands and woodlands (LADWP, 2006). |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Townsend's big-eared bats** | *Corynorhinus townsendii* | CSSC, USFS Sensitive | Occur in a variety of habitat types, including woodlands, grasslands, riparian communities, and active agricultural areas. Roost sites are in cavern-like spaces with open flyways found in caves, mines, tunnels, and, less often, in buildings and bridges, rock crevices, and hollow trees. Foraging habitat includes edge habitats along streams and areas adjacent to and within a variety of wooded habitats (LADWP, 2006). |
| **Spotted bats** | *Euderma maculatum* | CSSC | Roost in cliffs, and forage over open marshes, fields and riparian corridors, and prey almost exclusively on moths (GBUAPCD, 1997). The presence or absence of this species in the project area is not known since no night-time surveys have been conducted specifically in this area. |
| **Western small-footed myotis** | *Myotis ciliolabrum* | CSSC | Occur in deserts, chaparral, riparian zones and western coniferous forests. They feed on various small insects and roost in bridges, buildings, cliff crevices, caves, mines, and trees (WBWG, 2005). |
| **Long-eared myotis** | *Myotis evotis* | CSSC | Associated with forested habitat at higher elevations. This species roosts in crevices and cavities in trees, caves, mines, cliffs, and rocky outcrops on the ground. They also sometimes roost in buildings and under bridges (LADWP, 2006). Long-eared myotis forage among trees and over woodland ponds and streams (Bogan et al., 1998). |
| **Owens pupfish** | *Cyprinodon radiosus* | FE, SE | Populations occur in limited areas in the Owens Valley in part due to their susceptibility to predation by non-native fish. Known populations of Owens pupfish in the Owens Valley include those located near Well 368 in the Blackrock lease, at Warm Springs on the Cashbaugh Livestock Grazing lease, below BLM Springs, and at Marvin's Marsh (LADWP, 2004). The HCP currently being developed by LADWP will cover this species. |
| **Owens tui chub** | *Gila bicolor snyderi* | FE, SE | Owens tui chub are present along 8 miles of the Owens River below Long Valley Dam/Crowley Reservoir. The HCP currently being developed by LADWP will cover this species. |
| **Owens speckled dace** | *Rhinichthys osculus* spp. | CSSC | Populations are known to occur at two Long Valley sites (Whitmore Hot Springs and Little Alkali Lake), one East Fork Owens River site near Benton (a spring on Mathieu Ranch/Lower Marble Creek), and five sites in the northern Owens Valley (North McNally Ditch, North Fork Bishop Creek, irrigation ditch in north Bishop, Lower Horton Creek, and Lower Pine and Rock creeks) (CDFG, 1995). |

| Common Name | Scientific Name | Status | Notes |
|---|---|---|---|
| **Owens suckers** | *Catostomus fumeiventris* | CSSC | Widely distributed throughout the Owens Valley, and have been recorded from Bishop Creek, Rock Creek, irrigation canals near Bishop, and the Owens River through Pleasant Valley (LADWP, 2004). Owens sucker and Owens speckled dace may be able to persist in very shallow, backwater areas around Tinemaha Reservoir and in tule beds as well as in tributaries. |
| **Mountain yellow-legged frog** | *Rana muscosa* | ST | Occur on the Horseshoe Livestock Grazing lease and the Big Pine Canal Livestock Grazing lease. |
| **Northern leopard frog** | *Lithobates pipiens* | CSSC | Not documented to occur on the valley floor. |
| **Sierra Nevada yellow-legged frog** | *Rana sierra* | FC, SSC | Not documented to occur on the valley floor. |
| **Owens Valley web-toed salamander** | *Hydromantes* sp. | CSSC | Likely restricted in its range to Mono and Inyo counties on the east slope of the Sierra Nevada Mountains (CDFG, 1994a). This taxon is known to occur in localized talus adjacent to riparian areas in the vicinity of springs and mountain streams (CDFG, 1994a). This species is not expected to occur on or near the project leases because of its restricted range and absence of suitable habitat. |
| **Panamint alligator lizard** | *Elgaria panamintina* | CSSC | Known only from the vicinity of 15 isolated riparian localities below permanent springs in the Argus, Inyo, Nelson, Panamint, and White mountains of Inyo and Mono counties. They are confined mostly to narrow riparian strips associated with permanent springs in talus canyons composed of limestone, marble, and other metamorphic rocks (CDFG, 1994b). This species is not expected to occur on or near the project leases because of its restricted range and absence of suitable habitat. |
| **Springsnails** | *Pyrgulopsis spp.* | CSSC | Generally inhabit aquatic vegetation and gravel substrates in flowing water where they feed on algae. Springsnail species in the Owens Basin typically inhabit only springs and short sections of spring brooks located below 7,500 feet elevation with good water quality (USFWS, 1998b). |

Source: CDFG, 2009 and as noted.
Species Status: FE – Federal Endangered, FC – Federal Candidate, FT – Federal Threatened, SE – State Endangered, ST – State Threatened, CSSC – California Species of Special Concern

**Impacts to Sensitive Animal Species.** With the proposed supervision by LADWP biologists, temporary impacts on sensitive animal species during project construction will be less than significant. With the improvements to riverine-riparian habitat, rangelands, and springs and seeps under the OVLMP, project operation will have a beneficial impact on sensitive animal species.

To reduce impacts to biological resources to a less than significant level, the following mitigation measures shall be implemented:

**BIO-1 Sensitive Plants**

- Where present, areas of Owens Valley checkerbloom, Inyo County star-tulip, or other sensitive plant species will be flagged and access restricted during earth disturbing activities (mowing, fence post installation, stockwater well installation, roadway barrier installation, herbicide use and/or vegetation removal) to prevent impacts to rare plant species.

- Work within areas known for sensitive plants will be done by hand, including pounding fence posts by hand. Vehicles and larger construction equipment will be excluded from areas containing rare plant populations.

**BIO-2 Sensitive Animals**

- Prior to earth disturbing activities (mowing, fence post installation, stockwater well installation, roadway barrier installation, herbicide use and/or vegetation removal), LADWP biologists shall survey for active bird nests of sensitive species and active vole burrows. If nests are present, work shall be redirected or suspended in the immediate area until the nest is no longer active. If active vole burrows are observed, work will be redirected around the area. If a bat roost is identified during project fence or well installation, the situation will be evaluated and appropriate action taken to avoid impacts such as exclusion measures or providing an alternative roost site.

b) **Less Than Significant Impact With Mitigation Incorporated**. Project construction has the potential to disturb sensitive riparian plant communities related to vehicle travel outside of established roads, fence installation, stockwater well installation, and exotic plant removal. However, these activities will be done under the supervision of LADWP biologists. The overall impact of the project from fencing of riverine-riparian and seep/springs habitats, implementation of grazing management plans to prevent overgrazing, and modifications to recreation practices where habitat is being damaged will be to maintain and enhance sensitive plant communities; the impact is beneficial. Any temporary adverse impacts on riparian plant communities from project implementation are less than significant with mitigation incorporated.

To reduce impacts to biological resources to a less than significant level, the following mitigation measure shall be implemented:

**BIO-3 Sensitive Vegetation Types**

- Installation of project-related facilities (e.g., fences, stockwater wells, roadway barriers) and vegetation-disturbing activities within sensitive plant communities (e.g., exotics removal) will be done under the supervision of LADWP biologists.

c) **Less Than Significant Impact**. Wetlands under federal jurisdiction (Clean Water Act Section 404 administered by the U.S. Army Corps of Engineers) include those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support wetland vegetation. Based on mapping of year 2000 conditions, hydric soil, wetland hydrology and hydrophytic vegetation definitive of jurisdictional wetland were present in about 4,092 acres of the Middle Owens River project area (WHA, 2004). Fencing to protect sections of the Middle Owens River is proposed to protect the riparian vegetation from grazing. Fence posts will be installed at the top of the banks above the high water mark. Therefore, construction impacts to federally protected wetlands will be less than significant.

In addition to grazing management, the project includes exotics removal and recreation management to reduce impacts in riverine-riparian areas. Fences are proposed to protect springs and seeps on several leases (e.g., Locust Grove Spring exclosure at the 4J Ranch Livestock Grazing lease and fencing of the headsprings in the Salque and Fuller Meadows of the Baker Road Ranch Livestock Grazing lease). The overall impact on wetlands will be beneficial.

d) **Less Than Significant Impact.** Wildlife movements are often concentrated along riparian corridors like the Middle Owens River. The OVLMP is used by mule deer and tule elk on a regular basis, and by migratory birds such as waterfowl on a seasonal basis. The Owens River bottoms are very important to elk during summer and winter. During winter, many elk use the desert shrub lands east of the Owens River. Vegetation types and dense cover along the Owens River provide excellent elk calving habitat. The OVLMP includes specially designed "elk friendly" fence sections where new or old fences cross major known elk travel routes (e.g., Blackrock Livestock Grazing Lease). Special fence H-braces will be installed at known elk crossings to minimize damage to the fence and prevent injury to the animals. Improvements to the Middle Owens River riparian corridor through fence installation and grazing management actions will protect the habitat values of this wildlife corridor and elk nursery; the impact is beneficial.

Noise and disturbance during installation of fences, wells, and roadway barriers may temporarily impact wildlife movement; although the disturbance associated with these activities would not be substantially different from ongoing ranch operations. Therefore, the impact is less than significant. With installation of elk-friendly fencing, the overall impact on wildlife corridors and nursery sites is less than significant.

The Middle Owens River and streams in the OVLMP area are also wildlife corridors for a variety of fishes. Reach 1 of the Middle Owens River (Pleasant Valley Reservoir to Five Bridges) is designated as a Wild Trout Reach by the California Department of Fish and Game. Flow management of river in the OVLMP area will continue as under existing

conditions including restriction of ramping rates to 50 cfs per day on the ascending limb of the hydrograph and 25 cfs per day on the descending end. This limitation is in place to prevent bank sloughing (saturated banks collapsing into the river) that can occur when high flows are reduced over a short period of time. Bank sloughing causes cut banks, loss of riparian habitat, and increased sediment loads in the river. In addition, rapidly ramping up flows can disturb aquatic organisms through dislodgement, stress fish through water temperature and water quality changes, and result in greater sediment transport.

**e) Less Than Significant Impact.** No tree ordinances apply to the project area. The Inyo County General Plan Goals and Policies (2001) establishes goals and policies that are related to biological resources issues in the County (**Table 9**). As described in **Table 9,** the proposed project would not conflict with the Inyo County General Plan goals and policies intended to protect biological resources. Since the proposed project is consistent with the General Plan, the impact on local policies or ordinances protecting biological resources is less than significant.

**Table 9**
**Inyo County General Plan Goals and Policies Related to Biological Resources**

| Goal / Policy | Relationship to Project |
|---|---|
| *Goal BIO-1 – Maintain and enhance biological diversity and healthy ecosystems throughout the County.* | |
| Policy BIO-1.1, Regulatory Compliance – The County shall review development proposals to determine impacts to sensitive natural communities, of both local and regional concern, and special-status species. Appropriate mitigation measures will be incorporated into each project, as necessary. | The OVLMP has been submitted to Inyo County for review and comment. |
| Policy BIO-1.2, Preservation of Riparian Habitat and Wetlands – Important riparian areas and wetlands, as identified by the County, shall be preserved and protected for biological resource value. | The proposed project would protect riparian habitat areas by restricting grazing and managing recreation activities. |
| Policy BIO-1.3, Restoration of Biodiversity – Encourage the restoration of degraded biological communities. | Grazing and recreation management actions included in the proposed project will improve conditions on rangelands and riverine-riparian area of the Middle Owens River. |
| Policy BIO-1.4, Limitations for ERA's – The County shall discourage development in Environmental Resource Areas. | The proposed project does not involve development. |
| Policy BIO-1.5, Develop Outside of Habitat Areas – Work with regulatory agencies and private developers to direct development into less significant habitat areas. Discourage urban development in areas containing sensitive natural communities or known to contain special-status species. | The proposed project does not involve development. |
| Policy BIO-1.6, Wildlife Corridors – The County shall work to preserve and protect existing wildlife corridors where appropriate. | The proposed project includes elk crossing areas in new fencing where appropriate to protect wildlife corridors. |
| Policy BIO-1.7, Noxious Weeds – Avoid activities that will promote the spread of noxious weeds in the County. | The proposed project includes exotics removal as an adaptive management measure to meet habitat management objectives. |
| Policy BIO-1.8, Owens River Restoration – The County will work with the LADWP and regulatory agencies to complete the restoration of habitat values along the historic Owens River channel as mitigation for degradation done with water export activities. This policy shall apply to the portion of the Owens River identified as the Lower Owens River Project. | The proposed project will manage riverine-riparian resources on the Owens River upstream of the LORP area. Monitoring and adaptive management in the Middle Owens River is intended to complement LORP monitoring. |
| *Goal BIO-2 – Provide a balanced approach to resource protection and recreational use of the natural environment.* | |
| Policy BIO-2.1, Coordination on Management of Adjacent Lands – Work with other government land management agencies to preserve and protect biological resources while maintaining the ability to utilize and enjoy the natural resources in the County. | The proposed project includes a Recreation Management Plan (OVLMP Chapter 4) with the goal of balancing environmentally sensitive land management and recreation. |

| Goal / Policy | Relationship to Project |
|---|---|
| Policy BIO-2.2, Appropriate Access for Recreation – Encourage appropriate access to resource-managed lands. | The proposed project will restrict access for recreation in some areas where environmental damage is occurring (e.g., road closures to reduce stream bank erosion by vehicles) and divert recreationists to appropriate access points. The project also includes walkthrough structures in fencing to maintain recreation access. |
| Policy BIO-2.3, Hunting and Fishing – Promote hunting and fishing activities within the County pursuant to appropriate regulations of the California Fish & Game Code. | The proposed project would not decrease flows in any surface waters that would impact fishing. Access for fishing and hunting will be directed to appropriate areas to protect sensitive resources. |
| Policy BIO-2.4, Nature as Education – Provide and support passive recreational opportunities and interpretive education in the natural environment. | The proposed project includes educational tool such as signs, kiosks, brochures, website information and public cleanup events. |

**f) Less Than Significant Impact.** LADWP is currently preparing a Habitat Conservation Plan (HCP) for City of Los Angeles-owned lands in Inyo and Mono counties from the Mono Basin south to Owens Dry Lake. The goal is to protect and enhance habitat for T&E species through implementation of a low-effect, habitat-based HCP that protects covered species while allowing LADWP to continue their operations. The species to be covered under the HCP are Owens pupfish (*Cyprinodon radiosus*), Owens tui chub (*Gila bicolor snyderi*), Least Bell's Vireo (*Vireo bellii pusillus*), Yellow-billed Cuckoo (*Coccyzus americanus*), Southwestern Willow Flycatcher (*Empidonax traillii extimu*s) and Greater Sage Grouse (*Centrocercus urophasianus)*.

The HCP incorporates the *Owens Basin Wetland and Aquatic Species Recovery Plan* (1998) to describe specific actions and sites that have the greatest potential for recovery and delisting of species. The HCP will also relate to other existing recovery plans and species conservation efforts already drafted for areas that overlap the project area boundaries, including the *Draft Recovery Plan for the Least Bell's Vireo* (1998), the *Recovery Plan for the Southwestern Willow Flycatcher* (2002), and the *Conservation Strategy for the Southwestern Willow Flycatcher on City of Los Angeles Department of Water and Power Lands in the Owens Management Unit* (2005).

Fence installation included in the Grazing Management Plans of the OVLMP is consistent with restrictions on livestock grazing in riparian habitat areas along the Owens River corridor from May 1 to October 1 as per the Conservation Strategy for the Southwestern Willow Flycatcher. Other project actions such as fencing exclosures at springs and seeps and recreation management actions that protect streambanks also are consistent with species preservation strategies in these plans. Since the proposed project is consistent with existing

and proposed habitat conservation plans, the impact is less than significant. There will be no impact on any other adopted habitat plan or natural community conservation plan.

### 2.3.5 Cultural Resources

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | ☐ | ☒ | ☐ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☒ | ☐ | ☐ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☒ | ☐ | ☐ |

**Discussion:**

**Cultural Resources Plan.** The Cultural Resources Plan of the OVLMP (Chapter 6) establishes guidelines to protect cultural resources throughout the Middle Owens River area. For archeological sites, avoidance and preservation in place are the preferable forms of mitigation. When avoidance is infeasible, a data recovery plan would be prepared which adequately provides for recovering scientifically consequential information from the site.

**2006 Cultural Resources Survey**. A Class III heritage resource survey and report was prepared for the riparian corridor of the Middle Owens River (McCombs, 2006). A records search of both the riparian survey area and a wider 15,000-acre Middle Owens River area was conducted by the Eastern Information Center (EIC) of the California Historical Resources Information System (CHRIS) at the University of California, Riverside. The record search indicated that the majority of this area has not been previously surveyed for heritage resources. Of the 15 areas that have been previously surveyed, site records exist for 73 heritage sites, demonstrating that the Middle Owens River area is highly sensitive for prehistoric resources. In addition, the Middle Owens River area includes the Powona Witsu Archeological District, which is currently listed on the National Register of Historic Places (NRHP). The Native American Heritage Commission (NAHC) was consulted and a records search of the Sacred Lands file occurred in July 2006; three cultural resources areas were identified and it was later determined that they were not within the Middle Owens River project area.

Prior to the 2006 field investigations, Tribes in Inyo County were consulted and a predominantly Indian survey crew was formed. A systematic archaeological surface survey of the riparian corridor (39 linear miles (72 channel length miles) and 33 to 525 feet in width) was completed in March through May, 2006. Due to vegetation, ground visibility in the riparian corridor was poor

but was considered adequate for site location. Ground visibility on adjacent terraces was good to excellent. The survey identified 45 heritage sites located partly or wholly in the Middle Owens River riparian corridor. Of these sites 12 are prehistoric, 2 are multi-component (prehistoric and historic), and 31 are historic. The prehistoric sites include rock art, pottery, milling tools, extensive amounts of obsidian, and seasonal resource procurement. The historic resources reflect local history beginning with agricultural development (seven irrigation ditches), the Carson & Colorado Railroad (two sites), and the LAA (14 flowing wells, two drainage ditches, and one reservoir).

**2010 Cultural Resources Survey**. In addition to the extensive survey of the Middle Owens River area in 2006, survey for cultural resources at the eight specific locations proposed for stockwater wells (from north to south: Lacey Lower Mac, Lacey Laws Corrals, Cashbaugh Poleta, Cashbaugh South Warm Springs, Yribarren, Cashbaugh Ears, Mendiburu North, and Mendiburu South) was conducted on January 12-13, 2010 (Garcia and Associates, 2010a). A records search was conducted at the EIC on January 7, 2010. The record search included review of the California Department of Parks and Recreation's California Inventory of Historic Resources (1976) and the Office of Historic Preservation's Historic Properties Directory (2007), which combines cultural resources listed on the California Historical Landmarks, California Points of Interest, and those listed in or determined eligible for listing in the NRHP or the California Register of Historical Resources (CRHR). No resources within the search radius were listed or eligible for listing on the NRHP or CRHR, or any other historic designation. The records search revealed three prehistoric resources recorded within a 0.50-mile radius of the Mendiburu North stockwater well location. No archaeological materials have been recorded within a 0.50-mile radius of the other seven proposed stockwater well locations.

A search of the Sacred Lands file housed at the NAHC did not result in the identification of Native American cultural resources within 0.50-mile radius of the eight stockwater well locations. Thirteen Native American groups and individuals were contacted (by letter and phone) regarding the stockwater well locations; resources of concern for these locations were not identified by the tribal representatives contacted.

Pedestrian survey of the eight stockwater well locations resulted in the discovery and recordation of four archeological sites (prehistoric, historic, and multi-component surface manifestations).

The Cultural Resources reports completed for the project are on file with LADWP. To protect resources, site records are not appended to the IS.

a) and b) **Less Than Significant Impact With Mitigation Incorporated.** The sites identified in the 2006 McCombs study were evaluated for eligibility for listing in the CRHR. Nine sites were determined to be eligible or potentially eligible for the Register and 10 sites could not be fully evaluated. Installation of project facilities at these locations has the potential to disturb these resources; the impact is potentially significant. Mitigation Measures CUL-1 and CUL-2 shall be implemented to reduce impacts below a level of significance.

Four archaeological sites were identified at four separate stockwater well locations (including three historic finds) in the Garcia and Associates 2010 survey: historic homestead with water conveyance system, historic road side dump and water conveyance system, prehistoric lithic

scatter and habitation, and prehistoric lithic scatter with historic trash scatter and water conveyance system.

At three stockwater well locations, the specific site for well installation has been relocated to avoid cultural resources. At one location, a cultural resource site is located nearby but not in the immediate area for well construction. At the other four locations, no resources were observed.

Although project redesign will avoid known surface resources at the stockwater well locations, installation of the wells has the potential to disturb surface and subsurface archaeological materials at the project sites. None of the sites recorded in the stockwater well project areas have been formally evaluated to determine their significance, therefore disturbance to the sites is a potentially significant impact. Mitigation Measures CUL-1 and CUL-2 shall be implemented to reduce impacts below a level of significance.

In addition to fence installation along the Middle Owens River and installation of the stockwater wells, the OVLMP includes fence installation on leases away from the Owens River corridor. Cultural resources may occur on these leases. Modification of grazing practices would generally reduce the overall intensity of grazing, and thereby reduce any ongoing disturbances (if any) to archaeological sites, a beneficial impact. The installation of fence posts was previously deemed an insignificant impact by the State Office of Historic Preservation (Far Western, 2001) during evaluation of the LORP because the physical damage from post installation is very limited and diffuse. Therefore, fence installation under OVLMP at locations away from the Middle Owens River would similarly have a less than significant impact on cultural resources.

**CUL-1 Monitoring**

- If ground disturbances are proposed within the boundaries of, or in close proximity to:
  - The 19 sites located in 2006 and considered eligible, potentially eligible, or not fully evaluated for listing in the CRHP (McCombs, 2006)
  - The previously recorded archaeological sites described in McCombs, 2006
  - Sites identified during the 2010 survey of stockwater well locations (Garcia and Associates, 2010a)

  a qualified archaeologist shall delineate an approximately 50-foot buffer, using flagging tape, around each archaeological site where ground disturbances are proposed prior to the start of project construction. Specifically, Site 1309-03H (located in 2010) shall be clearly marked prior to ground disturbance for the Cashbaugh Ears stockwater well.

- Mowing, minor vegetation removal, fence installation, well installation, or other construction activity within the flagged buffer zones shall be monitored by an archaeologist. Stockwater well installation at Cashbaugh South Warmsprings, Cashbaugh Ears, Mendiburu North, and Mendiburu South shall be monitored by an archaeologist. If ground disturbing activities are planned within the Pawona Witsu Archaeological District, an archaeological monitor shall be present.

- Based on the NAHC contact list, Native American representatives shall be notified of project construction schedules at locations where an archaeological monitor will be present, and invited to be present during construction activity at these locations on a volunteer basis.

- If previously unrecorded cultural resources are encountered during the project, all work shall cease within 100 feet of the discovery until the find can be evaluated by a qualified archaeologist.

**CUL-2 Archaeological Resources Training**

- Prior to the start of construction or ground disturbing activities, construction personnel shall be trained by a qualified archaeologist regarding the possibility of encountering previously unidentified or buried cultural materials, including both prehistoric and historic resources, during construction. Worker education will focus on the rationale for cultural resources monitoring; regulatory policies protecting resources; basic identification of cultural resources; and the protocol to follow in case of discovery, including Native American burials.

With implementation of Mitigation Measures CUL-1 and CUL-2, project-related impacts on historic and archeological resources will be less than significant.

a) **Less Than Significant Impact With Mitigation Incorporated.** Physical damage from fence post installation is very limited and diffuse, therefore consideration of potential impacts to paleontological resources is focused on proposed stockwater well installation. A fossil locality search was conducted for the stockwater well locations on February 1, 2010 using the Berkeley Natural History Museum (BNHM) online database, which includes data from the University of California, Museum of Paleontology (UCMP). Paleontological field survey of these locations was conducted by an archaeologist cross-trained in paleontology (Garcia and Associates, 2010b). Paleontological materials were not observed on the ground surface at any of the eight stockwater well locations.

Geologic units with the potential for fossils have been mapped in the area of stockwater wells (Bateman, 1964a and 1964b):

- Alluvial Valley Fill – unconsolidated sand, silt and clay with high paleontological sensitivity.
- Younger Alluvial Fan Deposits of Holocene and Pleistocene Age – alluvial fan deposits, stream deposits of gravel, sand and silt, windblown sand, and deposits of silt and clay with high paleontological sensitivity.
- Older Alluvium with Lake Beds of Pleistocene and Potentially Tertiary Age – coarse sand and fine gravels with rare cobbles with undetermined paleontological sensitivity.
- Terrace Gravels of Pleistocene or Holocene Age – gravels of undetermined paleontological sensitivity.

If fossils are present at the stockwater well locations and not recovered or avoided during project-related ground disturbance, they could be destroyed, a potentially significant impact. Impacts to paleontologically sensitive geologic units will be less than significant with implementation of Mitigation Measures CUL-3 and CUL-4.

**CUL-3 Paleontological Resources Training**

- Prior to the start of construction, a qualified paleontologist or paleontologically trained archaeologist will conduct training for construction personnel to review the procedures to be followed upon the discovery of paleontological materials. Worker education will focus on the rationale for paleontological resources monitoring; regulatory policies protecting fossils; a basic identification of fossils; and the protocol to follow in case of discovery.

**CUL-4 Paleontological Resources Monitoring**

- A paleontologist shall develop and implement a monitoring protocol for stockwater well installation. If fossil materials are discovered, the monitor shall redirect or halt construction activities within 50 feet of the discovery, in accordance with the guidelines of the Society of Vertebrate Paleontology, to 1) evaluate the resource, and 2) make recommendations regarding their treatment. If relevant, data recovery, reporting, and curation would then be conducted as outlined in Garcia and Associates (2010b).

b) **Less Than Significant Impact With Mitigation Incorporated.** There was no evidence of human remains within the project site at the time the pedestrian surveys were conducted (2006, 2010). However, in the unexpected event that human remains are discovered, the Inyo County Coroner would be contacted, the area of the find would be protected, and provisions of State CEQA Guidelines Section 15064.5 would be followed.

With implementation of the below mitigation measure, CUL-5, project-related impacts on cultural resources will be less than significant.

**CUL-5 Discovery of Unexpected Remains**

- In the unexpected event that human remains are discovered, the Inyo County Coroner would be contacted, the area of the find would be protected, and provisions of State CEQA Guidelines Section 15064.5 would be followed. If the remains are determined to be of Native American origin, both the Native American Heritage Commission and any identified descendants shall be notified (Health and Safety Code Section 7050.5, Public Resources code Section 5097.94 and 5097.98).

## 2.3.6 Geology and Soils

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property? | ☐ | ☐ | ☐ | ☒ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

The Owens Valley of eastern California is a deep north-south trending basin, lying between the Sierra Nevada to the west and the White-Inyo Mountains to the east. The Owens Valley was formed as a fault block basin with the valley floor dropped down relative to the mountain blocks on either side.

The Owens Valley is the westernmost basin in a geologic province known as the Basin and Range, a region of fault-bounded, closed basins separated by parallel mountain ranges stretching from central Utah to the Sierra Nevada and encompassing all of the state of Nevada. Geological formations in the project areas are of Cenozoic age, chiefly Quaternary.

The soils in Owens Valley contain mostly Quaternary alluvial fan, basin-fill, and lacustrine (lakebed) deposits (Miles and Goudy, 1997). On alluvial fans, the soils are mostly Xeric and

Typic Torrifluvents, Xeric and Typic Torriorthents, and Xeric and Typic Haplargids (Miles and Goudy, 1997). All soils on alluvial fans are well drained (Miles and Goudy, 1997).

a)-i) and a)ii **Less Than Significant Impact.** Numerous faults are located in the Owens Valley including: Fish Slough, White Mountains, Independence, Lone Pine, and the delineated Alquist-Priolo Special Studies Zone for the Owens Valley / Sierra Nevada Fault Zone (Davis, 1985). Surface rupture on these faults is also possible outside of the currently mapped active traces of these range-front faults.

Since habitable structures will not be built as part of the proposed project, people will not be exposed to adverse effects involving seismic ground shaking. Proposed structures include fences, gates, stockwater wells, and transportation-related barriers; damage to these facilities could be easily repaired and impacts will therefore be less than significant.

a)-iii) **Less Than Significant Impact.** Liquefaction is a process by which sediments below the water table temporarily lose strength and behave as a liquid rather than a solid. In the liquefied condition, soil may deform enough to cause damage to buildings and other structures. Seismic shaking is the most common cause of liquefaction. Liquefaction occurs in loose sands and silts in areas with high groundwater levels; generally in areas where groundwater occurs within 30 feet of the ground surface (EERI, 1994). At many locations on Los Angeles-owned non-urban lands, depth to groundwater is less than 30 feet. However, since habitable structures will not be built as part of the proposed project, people will not be exposed to adverse effects involving seismic-related ground failure. Proposed structures include fences, gates, stockwater wells, and transportation-related barriers; damage to these facilities could be easily repaired and impacts will therefore be less than significant.

a)-iv) **Less Than Significant Impact.** Mountain fronts in the Owens Valley have slopes steep enough to initiate a landslide during an earthquake. Debris and mudflows are possible at some locations if saturated materials within nearby mountain stream valleys were released during an earthquake or as a result of an extreme meteorological event (e.g., heavy rainfall, rapid melt of a high snowpack). However, since habitable structures will not be built as part of the proposed project, people will not be exposed to adverse effects involving landslides. Proposed structures include fences, gates, stockwater wells, and transportation-related barriers; damage to these facilities could be easily repaired and impacts will therefore be less than significant.

b) **Less Than Significant Impact.** Construction activities associated with the OVLMP include minor soil disturbance related to installation of fences, gates, stockwater wells, and transportation-related barriers; exotics removal; and potentially ripping and reseeding of abandoned roadways. Since the areas to be affected are small, impacts related to erosion and loss of topsoil will be less than significant.

OVLMP management actions include closure of informally created roads and paths near streambanks. These closures and the reduction in vehicle travel near waterways will reduce soil erosion. Range management practices under the OVLMP will improve vegetation conditions and serve to stabilize soils on the leases. The project will have the beneficial impact of reducing soil erosion in the valley.

c) **Less Than Significant Impact.** Landslides, subsidence, liquefaction (and related lateral spreading) are potential hazards in the valley. Since groundwater use associated with the project is limited to stockwater supply, management actions to be implemented under the OVLMP will not substantially alter the potential occurrence of these hazards. Habitable structures will not be built as part of the proposed project. Proposed structures include fences, gates, stockwater wells, and transportation-related barriers; damage to these facilities could be easily repaired and impacts will therefore be less than significant.

d) **No Impact.** Habitable structures will not be built as part of the proposed project. Therefore, there will be no project-related impacts from expansive soils.

e) **No Impact.** Sanitation facilities proposed as part of the OVLMP are portable toilets not connected to any septic or sewer system (e.g., potential sanitary facilities at Klondike Lake). Therefore, there will be no impact on soils related to wastewater disposal.

### 2.3.7 Greenhouse Gas Emissions

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

c) **Less Than Significant Impact.** Greenhouse gases include, but are not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Project-related emissions of greenhouse gases will be limited to air pollutants generated during the temporary construction activities, primarily for fence, stockwater well, traffic barrier installation, and exotic species management. Operations-related air pollutant emissions will be the same as existing conditions and related to ranch operations, recreation, and periodic fires for land management on Los Angeles-owned non-urban lands in Inyo County. Potential reductions in air pollutants from ranching may result if there are reductions in the overall livestock numbers as a result of restrictions outlined in the Grazing Management Plans. Since operation of the project will not increase air pollutant emissions over existing conditions, the project will have no significant impact on climate change. Increases in vegetated area resulting from the project (within riparian exclosures and improvements to rangeland) will have a beneficial impact. As described above, construction of the project will result in less than significant combustion emissions from vehicles and equipment. The impact on emissions of greenhouse gases and therefore climate change will be less than significant.

d) **No Impact.** The following policies and regulations are relevant to climate change in California:

- **Global Change Research Act of 1990** - In 1990, Congress passed and the President signed Public Law 101-606, *the Global Change Research Act of 1990*. The purpose of the legislation was . . . *to require the establishment of a United States Global Change Research Program aimed at understanding and responding to global change, including the cumulative effects of human activities and natural processes on the environment, to promote discussions towards international protocols in global change research, and for other purposes.*

  To that end, Global Change Research Information Office (GCRIO) was established in 1991 to serve as a clearinghouse of information and to provide interagency Global

Change Data and Information System (GCDIS) to high level users. In 2000, the National Assessment Syntheses Team (NAST) formed under the United States Global Change Research Program (USGCRP) completed a report, entitled *National Assessment of the Potential Consequences of Climate Variability and Change*, to assess the potential impacts on a national and regional level. The U.S. Climate Change Science Program (USCCSP) was launched in February 2002 as a collaborative interagency program, under a new cabinet-level organization designed to improve the government wide management of climate science and climate-related technology development. The CCSP incorporates and integrates the USGCRP with the Administration's U.S. Climate Change Research Initiative (CCRI).

The CCRI builds on the USGCRP, with a focus on accelerating progress over a 5-year period on the most important issues and uncertainties in climate science, enhancing climate observation systems, and improving the integration of scientific knowledge into policy and management decisions and evaluation of management strategies and choices.

- **State of California Executive Order S-3-05** - The Governor of California signed Executive Order S-3-05 on June 1, 2005. The Order recognizes California's vulnerability to climate change, noting that increasing temperatures could potentially reduce snowpack in the Sierra Nevada, a source of water supply in the State. Additionally, according to this Order, climate change could influence human health, coastal habitats, microclimates, and agricultural yield. To address these potential impacts, the Order mandates greenhouse gas emission reduction targets. More specifically, by 2010, greenhouse gas emissions are expected to be reduced to 2000 levels; by 2020, emissions are expected to reach 1990 levels; and by 2050, emissions are expected to be 80 percent below 1990 levels.

  The Secretary of the California Environmental Protection Agency (CEPA) will oversee the reduction program targets and coordinate efforts to meet these provisions with numerous State agencies, such as the Resource Agency, which includes the DWR. The Secretary of CEPA will also provide biannual reports to the Governor and the State Legislature regarding: (1) progress toward meeting the greenhouse gas emissions targets; (2) the ongoing impacts of global warming in the State, including impacts to water supply and the environment; and (3) potential mitigation and adaptation plans to combat these impacts. In order to achieve the climate change emission targets, in June 2005, the Secretary of CEPA formed the Climate Action Team (CAT). The CAT includes representatives from Air Resources Board; Business, Transportation, and Housing Agency; Department of Food and Agriculture; California Energy Commission (CEC); California Integrated Waste Management Board, Resources Agency (including DWR), and Public Utilities Commission. The CAT submitted a report in 2006 outlining the preliminary strategy to reduce GHG emission.

- **State of California Assembly Bill 32 –** California Global Warming Solutions Act - Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was signed into law on September 27, 2006. With the Governor's signing of AB 32, the

Health and Safety Code (Section 38501, Subdivision (a)) now states the following: *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

AB 32 requires the California Air Resources Board (CARB), in coordination with State agencies as well as members of the private and academic communities, to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with this program. Similar to Executive Order S-3-05, under the provisions of the bill, by 2020, statewide greenhouse gas emissions will be limited to the equivalent emission levels in 1990. To achieve the 2020 reduction goal, by January 2011, CARB shall adopt emission limits and reduction measures, which may include a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gases. It is anticipated that limits and emission standards adopted by the CARB will become operative beginning January 2012. In addition, the CAT established by the Governor to coordinate the efforts set forth under Executive Order S-3-05 is expected to continue its role coordinating overall climate policy. On December 12, 2008, CARB adopted its Climate Change Scoping Plan pursuant to AB 32 (CARB, 2008).

- **State of California Senate Bill 375 -** On September 30, 2008, Governor Arnold Schwarzenegger signed Senate Bill (SB) 375, which seeks to reduce GHG emissions by discouraging sprawl development and dependence on car travel. SB 375 helps implement the AB 32 GHG reduction goals by integrating land use, regional transportation and housing planning.

As a land management plan with the potential to increase the quality of vegetated areas (riparian areas, seeps and springs, and rangeland), the proposed project is consistent with greenhouse gas policies and regulations. Therefore, there is no impact on these policies and regulations.

## 2.3.8 Hazards and Hazardous Materials

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a) and b) **Less Than Significant Impact.** Installation of project facilities (fences, gates, wells, barriers, etc.) will require fuel use for vehicles and construction equipment. Fuel will be contained within the manufacturer's tanks on all powered heavy equipment onsite, or in approved canisters for powered hand equipment (e.g., chainsaws). A fuel/service truck will visit as needed, parking at a non-sensitive location such as a road shoulder on level ground. Equipment operators will move equipment to the fuel/service truck for refueling. No fuel will be stored onsite.

Exotic plant control using herbicides is an adaptive management measure included in the OVLMP. Pesticides will be applied by trained personnel in a highly targeted manner to individual woody plants or targeted patches. Pesticides will not be applied when weather conditions, including wind conditions are unsuitable for application. Pesticides used to control invasive plants and weeds will conform to the requirements of the California Food and Agriculture Code. Herbicides to be used may include (but may not be limited to):

- Garlon 4® Herbicide (active ingredient triclopyr (as butoxyethylester; BEE)) - According to the Material Safety Data Sheet (MSDS) (Dow, 2009), Garlon 4® is highly toxic to aquatic organisms on an acute basis and slightly toxic to birds on an acute basis.
- Telar (active ingredient chlorsulfuron) in areas away from waterways – According to the MSDS for the compound (DuPont, 2009), the active ingredient is considered to have very low to slight aquatic toxicity.
- Rodeo® (active ingredient glyphosate) in areas near waterways - According the MSDS for this compound (Dow, 2004), it is practically non-toxic to aquatic organisms on an acute basis.
- Roundup® (active ingredient glyphosate) in areas near waterways - According the MSDS for this compound (Monsanto, 2001), in small quantities it has low environmental hazard.
- Weedar 64® (active ingredient 2,4-Dichlorophenoxyacetic acid) in areas near waterways – According to the MSDS for the compound (Nufarm, 2002), 2,4-D DMA salt rapidly dissociated to the parent acid in the environment.

Herbicides will be contained onsite only in small quantities (e.g., 2.5 gallon containers) sufficient for a single day use by backpack-sized sprayers. Since herbicides can be toxic to aquatic organisms, all label directions will be followed during use including avoidance of exposure of aquatic habitats. Per manufacturer's instructions, compounds will be prevented from entering soils, ditches, sewers, waterways and/or groundwater.

As is the current practice by LADWP, use of these hazardous materials will be carefully monitored to limit exposure of humans or environmental receptors. Therefore, impacts related to release or accidental exposure to humans or the environment will be less than significant.

e) **Less Than Significant Impact.** Exotic species control via herbicide use could potentially occur with ¼ mile of a school. Hazardous materials use will be limited to herbicides and fuels. Since these materials will be properly handled (as described above), the impact on the schools from hazardous materials will be less than significant.

f) **No Impact.** Section 65962.5 of the California Government Code requires the California Environmental Protection Agency (CalEPA) to update a list of known hazardous materials sites, which is also called the "Cortese List." The sites on the Cortese List are designated by the State Water Resources Control Board, the Integrated Waste Management Board, and the Department of Toxic Substances Control (DTSC).

Based on a search of hazardous waste and substances sites listed in the Department of Toxic Substances Control (DTSC) "EnviroStor" database; a search of leaking underground storage tank (LUST) sites listed in the State Water Resources Control Board (SWRCB) "GeoTracker" database; and a search of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit, there were no sites located directly on Los Angeles-owned ranches. However, the search of LUST sites in the GeoTracker database identified cases in the vicinity of Bishop that were adjacent to three of the leases:

- One LUST site was identified adjacent to the southwest portion of the 4J Ranch Lease (RLI-499). The site is identified as a Chevron gas station, located at 620 Main Street. The status of the case is listed as completed and closed. No new activities or structures are proposed on this portion of the ranch.

- One LUST site was identified adjacent to the eastern portion of the Quarter B Circle Ranch Lease (RLI-413). The site is identified as Bishop Hydro Plant #4, located on Bishop Creek Road. The status of the case is listed as completed and closed. No new activities or structures are proposed on this portion of the ranch.

- Four LUST sites were identified adjacent to the western portion of the Warm Springs Ranch Lease. The sites were identified as the Bishop Maintenance Workshop, located at 701 Main Street; California Highway Patrol, located at 469 Main Street; Green Motors Used Car Lot, located at 400 Main Street; and LADWP Inyo County Yard, located at 240 Main Street. All four cases have a status listing of completed and closed. No new activities or structures are proposed on this portion of the ranch.

Since no sites are located directly on Los Angeles-owned ranches, and since the immediately adjacent sites noted above are all completed and closed, the project will have no impact on hazardous materials sites.

e) and f) **No Impact.** There are seven public airports (located near the communities of Bishop, Furnace Creek, Independence, Lone Pine, Stovepipe Wells, Trona, and Shoshone) and six private airstrips in Inyo County (Inyo County, 2001). Management actions included in the OVLMP do not include tall structures, new lighting, expanded new waterfowl areas, or other elements that could be potential hazards to aviation. Therefore, there are no project-related impacts on airport safety.

g) **Less Than Significant Impact.** Roadway alterations included in the project are limited to closure of informally created roads and paths to waterways. None of these roads are part of an adopted emergency response plan or emergency evacuation plan. Construction activities for fence, stockwater well, and roadway barrier installation will be primarily away from major thoroughfares and would therefore not interfere will the movement of emergency vehicles on public roads. Travel for construction workers and equipment related to the project will have a less than significant impact on emergency access and evacuation plans.

h) **Less Than Significant Impact.** The proposed project does not include habitable structures, and therefore will not expose new residents to hazards associated with wildland fires. However, rangeland management actions included in the OVLMP could increase the volume of fuels and in turn increase the fire frequency potential as well as the effort needed to prevent and manage wildfire in the future. The OVLMP includes limited controlled burning to achieve habitat management goals. Fire management actions for uncontrolled burns are:

- No burning will be allowed on LADWP lands without written approval from LADWP.
- Lessees will not burn any part of their allotments without LADWP approval.
- All managed burning for the purposes of improving rangeland, wildlife habitat, and/or watershed conditions will be conducted under the direction of LADWP.
- LADWP will determine the grazing rest needed to allow rehabilitation of fire impacts, should they exist.
- No managed burning will be allowed in riparian habitats without proper study and evaluation.
- Unintentional fires in riparian woodland areas will be given high priority for fire suppression.

With implementation of the fire management measures contained in the OVLMP, impacts on people and structures from wildland fires will be less than significant.

## 2.3.9 Hydrology and Water Quality

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☐ | ☒ |
| f) Otherwise substantially degrade water quality? | ☐ | ☐ | ☒ | ☐ |
| g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☒ | ☐ |
| j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☒ | ☐ |

**Discussion**: One element of the OVLMP is the management of the riverine-riparian area of the Middle Owens River, the 63-miles of the river from Pleasant Valley Reservoir to the LAA intake. Major tributaries to the Middle Owens River flow from the Sierra Mountains on the west and include Bishop Creek, Horton Creek, Big Pine Creek, Birch Creek, Taboose Creek, and Tinemaha Creek. Numerous other tributaries, including those from the White Mountains to the east, provide ephemeral flows during the wet season. Special studies were completed to prepare the OVLMP River Management Plan: riparian vegetation inventory; habitat assessment; site scale vegetation, habitat and channel morphology; and hydrologic modeling.

From Pleasant Valley Reservoir to the LAA intake, the river is managed as though it is the northern extension of the aqueduct. The average annual flow in the Middle Owens River since 1991 has been 295 cfs, with flow fluctuations dependent on LADWP operational needs rather than natural conditions. LADWP manages flow by ramping up the flow during times of high water demand and ramping down the flow during periods of low water demand. Since 2007, changes in ramping rates have been limited to avoid adverse channel morphology changes, and water quality and habitat impacts that can occur with rapid flow changes. Pulse flows in excess of 600 cfs are released in most years in April and May from Pleasant Valley Reservoir.

Under the OVLMP River Management Plan, flows in the river will continue to be managed as under existing conditions:, the daily ramping rate on the ascending limb of the hydrograph is 50 cfs and daily ramping rates on the descending limb are limited to 25 cfs. An additional pulse flow will be released in most years.

a) and f) **Less Than Significant Impact.** Beneficial uses of the Owens River and other streams in the valley are itemized in the Basin Plan for the Lahontan Region (Lahontan Regional Board, 2005) and include (among others) domestic and agricultural supply, recreation, and wildlife habitat. Numeric water quality standards for certain parameters (such as total dissolved solids, chloride, sulfate, fluoride, boron, nitrate, total nitrogen, and orthophosphate) for the Owens River and several of the smaller waterways are also set in the Basin Plan.

No waste discharges are associated with operation of the proposed project and flow management of the Middle Owens River will be the same as existing practices. During construction of OVLMP management actions, minor disturbance to surface soils will result from fence installation, stockwater well installation, road barrier placement, exotics removal and revegetation efforts. Since the volume of soil to be disturbed under the project is minor and localized, increases of sediment load in stormwater would not adversely affect surface water beneficial uses and impacts will therefore be less than significant. Closure of select roadways for recreation management will have a beneficial impact on water quality, by reducing sedimentation related to vehicle travel on river banks and through revegetation of closed roads and paths.

b) **Less Than Significant Impact.** The 1991 Long Term Water Agreement (LTWA) is a joint groundwater management agreement between LADWP and Inyo County that resulted from disputes regarding the impacts of increased water exports from the Owens Valley to the City of Los Angeles after completion of the second barrel of the Aqueduct in 1970. The overall goal of the LTWA is to manage the water resources (particularly groundwater) within Inyo County in a manner that "avoid[s] certain described decreases and changes in vegetation and

to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in Inyo County."

The groundwater management mechanism specified in the Green Book (the technical appendix to the LTWA) uses vegetation and soil moisture monitoring sites located throughout the valley to determine if sufficient soil moisture is present in the plant root zone to sustain the plants at the site. Each monitoring site has a number of nearby LADWP production wells associated with it. If the soil moisture is sufficient, the associated wells can be operated (ON status); if the soil moisture is insufficient, the associated wells are not operated (OFF status) to allow the soil moisture to be replenished from the water table. Wells proposed under the OVLMP will be used solely to supply water for livestock; they will not be production wells related to water exports from the valley, and therefore their operation is not subject to the provisions of the Green Book.

No changes to surface water diversions are included in the project, and therefore there will be no change in groundwater recharge from surface water bodies. Enhancements if rangeland and riparian vegetation resulting from the project will change evapotranspiration rates over existing conditions, but this minor effect would not substantially deplete groundwater supplies or impact off-site groundwater users. Extractions of groundwater will result from the new stockwater wells, although no overall increase in livestock water demand over existing conditions is anticipated. Therefore, the project will have a less than significant impact on groundwater volumes.

c) and d) **Less Than Significant Impact.** No alteration to surface water features which would result in a change to the drainage pattern of the area is proposed under the project. Surface waters on, and adjacent to, the Los Angeles-owned ranches include streams and irrigation ditches. The Grazing Management Plans of the OVLMP include improved maintenance of irrigation ditches and headgates, and improved and more intensive irrigation practices (e.g., new sprinkler irrigation system proposed for the Eight Mile Livestock Grazing lease). Under the existing terms of the lease agreements between LADWP and the ranchers/farmers, the lessees receive up to 5 acre-feet (AF) of water per irrigated acre of land per irrigation season (April to September in Inyo County). Under the OVLMP, the volume of irrigation water available to lessees will not be modified. New fences installed under the OVLMP will have approximately 2-inch wide posts. Since these structural improvements are so limited in area, alteration to surface drainage and exiting flooding patterns will not be substantial. The impact on erosion, siltation and flooding is less than significant.

e) **No Impact**. The OVLMP will not alter the volume of stormflows or modify existing stormdrain systems, over the existing practice of maintaining water delivery channels. Improvements in vegetation conditions on rangelands and riparian areas may decrease sediment transport in stormflows, a beneficial impact on stormwater quality. Otherwise, the project will have no impact on the capacity of existing or planned stormwater drainage systems nor an addition of substantial new sources of polluted runoff.

g) **No Impact**. As no habitable structures are proposed by the OVLMP, the project will have no impact on housing in a 100-year flood hazard area.

h) and i) **Less Than Significant Impact.** A 100-year floodplain has been delineated adjacent to the Owens River and other major waterways in the valley (e.g., Big Pine Creek) (FEMA, 1985). Although habitable structures are not proposed by the OVLMP, fences with approximately 2-inch posts are proposed to protect riparian resources, including areas within the 100-year flood plain. Since structures proposed under the project (fence posts, stockwater wells, and road barriers) are so limited in surface area, there will be no substantial impediment or redirection of flood flows, nor risks to habitable structures. No levees or dams will be constructed or altered as part of project implementation. The impact on flooding is less than significant.

j) **Less Than Significant Impact.** Due to the distance to the coast, risks associated with tsunamis are not relevant to the project area. Earthquake induced seiche is a possible phenomena on large water bodies, such as the reservoirs in the valley. Mudflows have also occurred in some areas. However, the proposed project does not include new habitable structures and would not alter risks to existing habitable structures. Proposed structures include fences, gates, stockwater wells, and transportation-related barriers; damage to these facilities could be easily repaired and impacts will therefore be less than significant.

## 2.3.10 Land Use and Planning

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a) **No Impact.** Project lands are zoned for open space and used for ranching, wildlife habitat, and recreation. A few ranch houses are located on the leases, but the project will not impact these residences or otherwise divide an established community. The OVLMP is applicable to non-urban lands. Therefore, there will be no project-related impacts on established communities.

b) **Less Than Significant Impact.** The Inyo County General Plan (2001) includes biological resources goals summarized in **Table 9**. Consistent with the General Plan, the OVLMP will protect riparian resources and improve rangeland condition. The General Plan also includes Policies AG-1.8 - promote sustainable agricultural activities to lessen environmental impacts; WR-3.1 - protect, maintain, and enhance watersheds within Inyo County; and REC-1.2 - encourage the continued management of existing recreational areas and open space, and appropriate expansion of new recreational opportunities on federal, state, and LADWP lands. Consistent with the General Plan, the OVLMP will promote sustainable agriculture by establishing Grazing Management Plans, protect the watershed, and manage recreation on LADWP lands; the impact is less than significant on applicable land use plans and policies.

c) **Less Than Significant Impact.** As noted in Section 2.3.4, LADWP is currently preparing a Habitat Conservation Plan (HCP) for City of Los Angeles-owned lands in Inyo and Mono counties from the Mono Basin south to Owens Dry Lake. The proposed project is consistent with existing and proposed habitat conservation plans; the impact is less than significant. There will be no impact on any other adopted habitat plan or natural community conservation plan.

### 2.3.11 Mineral Resources

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a) and b) **No Impact.** The predominant mining activity in Inyo County is the extraction of aggregate resources (stone, sand, gravel and clays) (Inyo County, 2001). There is also mining for silver and gold in the County, and mining of borates and soda ash from Owens Lake. There is no existing mining activity on the leases or at the recreational sites identified for management activities. Implementation of the proposed project will include installation of fences, gates, stockwater wells, and road barriers, and changes to grazing management practices. These actions will not limit future mineral recovery activities or result in the loss of availability of known mineral resources. Therefore, there will be no project-related impacts on mineral resources.

## 2.3.12 Noise

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | ☒ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a) and d) **Less Than Significant Impact.** Noise generating equipment that will be used to construct project fences, install stockwater wells, revegetate closed roadways, and manage invasive plant species will include drill rigs, power augers, air compressors, ditch witches, backhoes, and all terrain vehicles. These construction activities will occur on active ranches and at recreation areas throughout the valley. Noise may be temporarily noticeable to ranch residents, ranch workers and/or persons visiting the recreation areas. Due to the generally remote location of proposed new facilities and short duration of construction activity at any one location, maximum acceptable noise levels prescribed by the Inyo County General Plan (2001) (e.g., 60 Ldn (Day-Night Average Sound Level) for residences and schools) would not be anticipated to be exceeded. Therefore, project-related noise impacts will be less than significant.

b) **Less Than Significant Impact.** Well drilling and the use of power augers for fence installation may create minor groundborne vibration or groundborne noise. Due to the distance to habitable structures from the construction sites and the short duration of the

construction activity at any one location, impacts related to temporary groundborne vibration or noise will be less than significant.

c) **No Impact.** The project is a management plan for Los Angeles-owned, non-urban lands in the Owens Valley. Aside from temporary construction of new facilities (fences, stockwater wells, roadway barriers, etc.) noise in the project areas would be the same as existing conditions. The project does not include any new transportation facilities or necessitate additional vehicle travel over existing conditions. Therefore, there will be no permanent increase in ambient noise levels related to the project.

e) and f) **No Impact.** There are seven public airports and six private airstrips in Inyo County (Inyo County, 2001). The project does not include habitable structures and therefore will not expose people residing or working in the area to excessive noise levels related to aviation. Therefore, there will be no project-related impact.

## 2.3.13 Population and Housing

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

**Discussion**:

a) through c) **No Impact.** The project does not include new habitable structures or extension of infrastructure facilities. No housing or people will be displaced by the management actions included in the OVLMP. Therefore, there will be no project-related impacts on population and housing.

### 2.3.14 Public Services

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| i) Fire protection? | ☐ | ☐ | ☒ | ☐ |
| ii) Police protection? | ☐ | ☐ | ☐ | ☒ |
| iii) Schools? | ☐ | ☐ | ☐ | ☒ |
| iv) Parks? | ☐ | ☐ | ☐ | ☒ |
| v) Other public facilities? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a)-i) **Less Than Significant Impact.** Rangeland management actions included in the OVLMP could increase the volume of fuels and in turn increase the fire frequency potential as well as the effort needed to prevent and manage wildfire in the future. As described above, the OVLMP includes limited controlled burning to achieve habitat management goals as well as fire management actions for uncontrolled burns. With implementation of the Fire Management actions of the OVLMP, increases in the need for fire services will be less than significant.

a)-ii – v) **No Impact.** Habitable structures are not proposed as part of the project. Recreation use and the subsequent need for police services would be the same as existing conditions. Therefore, there would be no project-related impacts on police protection, schools, parks, or other public facilities.

## 2.3.15 Recreation

| | Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| a) | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☒ | ☐ |
| b) | Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a) **Less Than Significant Impact.** Habitable structures are not proposed as part of the project, therefore the project will not result in population increases that subsequently increase the use of park and recreational facilities. Under the OVLMP, the level of recreational use on Los Angeles-owned lands is expected to be the same as existing conditions. However, implementation of the recreation management actions is expected to reduce impacts to natural resources in recreation areas, a beneficial impact.

b) **Less Than Significant Impact.** The OVLMP includes a Recreation Management Plan for Los Angeles-owned, non-urban lands in the valley. Under the plan, informally-created roads will be closed in some areas to limit vehicle traffic adjacent to waterways. These closures will restrict recreation access but will improve resource management. In general, road closures will involve blocking select pathways while leaving other, designated paths and parking areas available. In addition to barriers to direct vehicle travel, the plan also includes walkthroughs in fencing to improve recreation access, informational signage and kiosks, possible sanitary and trash facilities, parking area modifications, OHV management, and campsite management. Within the context of overall recreational opportunities on Los Angeles-owned lands in the Owens Valley, the impact on recreation from the restrictions included in the OVLMP is less than significant. Over time, improvements in land management will be a beneficial impact on recreation in the valley.

### 2.3.16 Transportation and Traffic

| Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable congestion management program, including but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☒ | ☐ |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| e) Result in inadequate emergency access? | ☐ | ☐ | ☐ | ☒ |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a) and b) **Less Than Significant Impact.** Construction of project facilities such as fences, stockwater wells, and traffic barriers will result in a minimal number of construction vehicles and workers traveling in the valley. There will be no impact on traffic patterns in the towns. The temporary increase in traffic in and around the rural project sites is less than significant.

c) **No Impact.** The OVLMP does not contain management actions that would alter air traffic patterns or promote population growth and the use of airports. Therefore, no impacts on air safety will occur.

d) **Less Than Significant Impact.** The project includes the installation of traffic barriers to restrict vehicles on informally created roads and paths. Management of OHV is also proposed in some areas (e.g., off Reata Lane southwest of Bishop). The proposed actions will manage recreation-related traffic but will not increase roadway hazards. The impact is less than significant.

e) **No Impact.** As is existing practice, keys to gates on Los Angeles-owned lands are provided to emergency service providers. There will be no project-related impact on emergency access.

f) **No Impact.** The project does not include housing, employment, or roadway improvements relevant to alternative transportation measures. Recreational biking within the OVLMP area is an existing use that will continue. There will be no project-related impacts on alternative transportation.

## 2.3.17 Utilities and Service Systems

| Issues and Supporting Information Sources | | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a) | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ |
| b) | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| c) | Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| d) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☐ | ☒ |
| e) | Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| f) | Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☐ | ☒ |
| g) | Comply with federal, state, and local statues and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a) through g) **No Impact.** The project does not include or induce housing or employment which would result in the need for expanded public services and utilities. With the exception of irrigation and livestock watering facilities, the project does not propose new infrastructure (potable water, sewage, or solid waste). The project includes provision of stockwater, through installation of several new stockwater wells, on select ranches to reduce impacts from livestock watering along the Owens River and subsequently trampling riparian vegetation. New plumbing or potable water service for human populations is not proposed. Therefore, there will be no project-related impacts on public utilities and service systems.

## 2.3.18 Mandatory Findings of Significance

| | Issues and Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| a) | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b) | Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? | ☐ | ☐ | ☐ | ☒ |
| c) | Does the project have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)? | ☐ | ☐ | ☒ | ☐ |
| d) | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a) **Less Than Significant Impact With Mitigation Incorporated.** Construction of the proposed project has the potential to temporarily disturb wildlife on the project sites due to noise and human presence. Additionally, rare plants are known for the project sites and could be disturbed during fence placement, well installation or equipment movement for vegetation management activities. However, work will be conducted under the supervision of LADWP biologists. Active bird and mammal nests as well as rare plants will therefore be avoided during construction activities, and impacts on biological resources will be less than significant with mitigation. Overall, implementation of the OVLMP will have a beneficial impact on vegetation and wildlife.

Cultural resources are present on the project sites. Mitigation measures have been defined to avoid existing resources, and to monitor construction activities in areas within 50 feet of existing resources. With implementation of mitigation measures, impacts on cultural resources will be less than significant.

b) **No Impact**. The goals of the OVLMP are to: continue to supply water to the City of Los Angeles; implement sustainable land management practices for agriculture (grazing) and other resource uses; continue to provide recreational opportunities on all city-owned lands; improve biodiversity and ecosystem health (condition); and protect and enhance habitat for T&E species. There are no short-term goals related to the project that would be disadvantageous to these long-term goals of the proposed resource management plan.

c) **Less Than Significant Impact.** The OVLMP is an overarching resource management plan for Los Angeles-owned non-urban lands in Inyo County (excluding the LORP area). Cumulatively with other land management efforts (Yellow-billed Cuckoo Habitat Restoration Plan, Additional Mitigation Projects Developed by the MOU Ad Hoc Group, Habitat Conservation Plan for City of Los Angeles-owned lands in Inyo and Mono counties), the proposed project will be beneficial for land management, recreation and wildlife. Cumulative temporary impacts from implementation of the proposed project and the related land management activities are less than significant.

d) **Less Than Significant Impact.** The proposed project would have an impact on local agriculture by restricting the operations of lessees on LADWP-owned lands (establishing forage utilization rates and grazing timing restrictions) and restricting a portion of some leases to non-agricultural use (either completely or during certain periods). While these restrictions include construction of limited fencing, they do not represent irrevocable conversion of land use. Since these restrictions do not eliminate grazing on the leases and are management actions necessary to meet the multi-purpose uses of the parcels (agriculture, wildlife habitat, and recreation), the impact will be less than significant.

The project also includes restrictions on recreation on LADWP-owned lands. Traffic barriers may be installed to redirect vehicles to established parking areas, walkthroughs may be placed in key areas to allow continued access, and roads may be closed to protect natural and cultural resources. Within the context of overall recreational opportunities on Los Angeles-owned lands in the Owens Valley, the impact on recreation from the restrictions included in the OVLMP is less than significant. Over time, improvements in land management will be a beneficial impact on recreation in the valley.

# Section 3
# References, Abbreviations and Report Preparation

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## 3.2 ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| **AF** | acre-feet |
| **BEE** | butoxyethylester |
| **BLM** | (United States) Bureau of Land Management |
| **BMP** | best management practice |
| **BNHM** | Berkeley Natural History Museum |
| **BPRGS** | best pasture rotation grazing strategy |
| **CalEPA** | California Environmental Protection Agency |
| **Caltrans** | California Department of Transportation |
| **CARB** | California Air Resources Board |
| **CDF** | California Department of Forestry |
| **CDFG** | California Department of Fish and Game |
| **CDOC** | California Department of Conservation |
| **CEQA** | California Environmental Quality Act |
| **cfs** | cubic feet per second |
| **CHRIS** | California Historical Resources Information System |
| **CNEL** | community noise equivalent level |

| | |
|---|---|
| **CO** | carbon monoxide |
| **CRHR** | California Register of Historical Resources |
| **CSSC** | California Species of Special Concern |
| **CWA** | Clean Water Act |
| **dBA** | Decibel, A-weighted scale |
| **DTSC** | (California) Department of Toxic Substance Control |
| **EERI** | Earthquake Engineering Research Institute |
| **EIR** | Environmental Impact Report |
| **ESI** | Ecosystem Sciences, Inc. |
| **Farmland** | Prime Farmland, Unique Farmland, or Farmland of Statewide Importance |
| **FE** | Federal Endangered (species) |
| **FEMA** | Federal Emergency Management Agency |
| **FMMP** | Farmland Mapping and Monitoring Program |
| **GBUAPCD** | Great Basin Unified Air Pollution Control District |
| **HCP** | Habitat Conservation Plan |
| **IS** | Initial Study |
| **LAA** | Los Angeles Aqueduct |
| **LADWP** | (City of) Los Angeles Department of Water and Power |
| **LORP** | Lower Owens River Project |
| **LTWA** | Long Term Water Agreement |
| **LUST** | leaking underground storage tank |
| **MND** | Mitigated Negative Declaration |
| **MOA** | Memorandum of Agreement |
| **MOU** | Memorandum of Understanding |
| **NAHC** | Native American Heritage Commission |
| **NEPA** | National Environmental Policy Act |
| **NOx** | nitrogen oxides |
| **NPS** | National Parks Service |
| **NRHP** | National Register of Historical Places |
| **OHV** | off-highway vehicle |
| **OVC** | Owens Valley Committee |
| **OVLMP** | Owens Valley Land Management Plan |

| | |
|---|---|
| **OVMA** | Owens Valley Management Area |
| **PM10** | particulate matter 10 microns or less in diameter |
| **PM2.5** | particulate matter 2.5 microns or less in diameter |
| **SCAQMD** | South Coast Air Quality Management District |
| **SE** | State Endangered (species) |
| **SLC** | State Lands Commission |
| **SNA** | Significant Natural Areas |
| **SOx** | sulfur oxides |
| **SRA** | State Responsibility Area |
| **SWRCB** | State Water Resources Control Board |
| **T&E** | threatened and endangered (species) |
| **THPO** | Tribal Historic Preservation Officer |
| **UCMP** | University of California Museum of Paleontology |
| **USEPA** | United States Environmental Protection Agency |
| **USFS** | United States Forest Service |
| **USFWS** | United States Fish and Wildlife Service |
| **USGS** | United States Geological Survey |
| **VOC** | volatile organic compound |
| **WHA** | Whitehorse and Associates |
| **YBC** | Yellow-billed Cuckoo |

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